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## INTRODUCTION

The purpose of this Introduction is to present general information relating to the 1950 Census of Agriculture, to indicate procedures by which the statistics presented in the reports were collected, compiled, and published, and to discuss factors affecting the accuracy and the reliability of the data.

**Legal basis for the 1950 Census of Agriculture.**—The Seventeenth Decennial Census was authorized by the Act of Congress approved June 18, 1929 (46 Stat. 21; 13 USC 201-218). This Act entitled, "An Act to provide for the fifteenth and subsequent decennial censuses and to provide for apportionment of Representatives in Congress," provided that a census of population, agriculture, irrigation, drainage, distribution, unemployment, and mines should be taken by the Director of the Census in the year 1930 and every 10 years thereafter.

**Area.**—The 1950 Census of Agriculture included the 48 States, the District of Columbia, Alaska, Hawaii, Puerto Rico, Guam, American Samoa, and the Virgin Islands of the United States. The statistics on agriculture for the territories and possessions are published separately in part 34 of Volume I of the 1950 Census of Agriculture reports, and are not included in this volume.

**History of the census of agriculture.**—The first national census of agriculture was taken in connection with the Sixth Decennial Census of Population in 1840. Since 1840, a census of agriculture has always been taken in conjunction with each decennial census of population. Congress first provided for a mid-decennial census of agriculture in 1915, but because of World War I this Census was not taken. Congress again provided for a mid-decennial census of agriculture to be taken as of January 1, 1925. Other mid-decennial censuses were taken in 1935 and 1945. Thus, there has been a census of agriculture every fifth year since 1920.

**Date of enumeration.**—The date of the beginning of the enumeration of the 1950 Census of Agriculture was April 1, as established by the Act of Congress providing for the taking of the decennial census. In most areas of the United States, the actual enumeration was begun on April 1. The size of the enumeration district was planned so that the enumerator could complete an enumeration of a district within four weeks. The average date of enumeration and the percent distribution of agriculture questionnaires enumerated by periods are given in table 1.

The year and the date for the beginning of actual enumeration for the various censuses of agriculture were as follows:

1950—April 1	1925—January 1	1880—June 1
1945—January 1	1920—January 1	1870—June 1
1940—April 1	1910—April 15	1860—June 1
1935—January 1	1900—June 1	1850—June 1
1930—April 1	1890—June 1	1840—June 1

**Preparation of questionnaires used for the census of agriculture.**—The Act of Congress providing for the Fifteenth Decennial Census of Agriculture authorized the Director of the Bureau of the Census to determine, with the approval of the Secretary of Commerce, the number, form, and subdivision of the inquiries for the census of agriculture. The questionnaire for the 1950 Census of Agriculture was prepared by the staff of the Bureau of the Census on the basis of the experience for prior censuses, on the basis of pretests made during the preparation and planning for the census, and on the basis of the advice of a special advisory committee for the 1950 Census of Agriculture appointed by the Director of the Bureau of the Census. The membership of this committee was as follows:

J. T. Sanders----- Legislative Counsel  
National Grange

Murray R. Benedict-----	Professor of Agricultural Economics College of Agriculture University of California
Foster F. Elliott-----	Associate Chief Bureau of Agricultural Economics U. S. Department of Agriculture
W. Eugene Hamilton-----	Economist American Farm Bureau Federation
Victor Hawkins-----	Director of Research Capper Publications, Inc., representing the Agricultural Publishers Association
John J. Riggle-----	Director of Cooperative Services National Council of Farmers' Cooperatives
John F. Timmons-----	Professor of Economics Iowa State College, representing the American Farm Economic Association
L. M. Walker, Jr. (Replaced by Parke C. Brinkley, May 14, 1951)	Commissioner of Agriculture, State of Virginia, representing the National Association of Commissioners, Secretaries, and Directors of Agriculture
Russell Smith-----	Legislative Representative Farmers' Educational and Cooperative Union of America

The Special Advisory Committee for the 1950 Census of Agriculture assisted particularly in deciding the inquiries which should be included on the questionnaire for the 1950 Census. During the planning, State colleges, the Department of Agriculture, and other users of data from the census of agriculture were asked to submit suggested inquiries for the census. The number of inquiries recommended to the Bureau of the Census greatly exceeded the number that could be included. The Special Advisory Committee for the 1950 Census of Agriculture and the staff of the Bureau recommended the inclusion and exclusion of these inquiries in the census after giving consideration to possibilities of obtaining the information in some way other than through the Census of Agriculture; to the adequacy of the information that might be secured in the Census of Agriculture; to the availability of data from other sources; to the usefulness of the data, etc. This committee reviewed the plans and questionnaires for the 1950 Census of Agriculture as they were developed, and submitted recommendations regarding these plans and questionnaires.

The over-all plans for the census of agriculture were reviewed by a Census Advisory Committee consisting of seven members appointed from the membership of the American Statistical Association by the board of directors of that organization. The membership of this committee was as follows:

William F. Ogburn-----	Department of Sociology The University of Chicago Chicago, Illinois
Donald R. G. Cowan-----	Professor of Marketing School of Business Administration University of Michigan Ann Arbor, Michigan
Murray R. Benedict-----	Giannini Foundation University of California Berkeley, California
J. Frederic Dewhurst-----	Twentieth Century Fund New York, New York
Frederick F. Stephan-----	Department of Economics and Social Institutions Princeton University Princeton, New Jersey

# VOLUME II

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# INTRODUCTION

(ix)

Willard L. Thorp----- Assistant Secretary of State  
 Department of State  
 Washington, D. C.  
 Ralph J. Watkins----- Director of Research  
 Dun and Bradstreet, Inc.  
 New York, New York

Because of the special interest of the United States Department of Agriculture in the census of agriculture, the Director of the Bureau of the Census also sought the cooperation of that organization in developing plans, questionnaires, and procedures for the 1950 Census of Agriculture. A joint committee of the Bureau of the Census and the Bureau of Agricultural Economics of the United States Department of Agriculture was established in July 1947 for the purpose of coordinating and planning work to be performed by the two agencies. The membership of this committee was as follows:

- Bureau of the Census:  
 A. Ross Eckler, Deputy Director  
 Ray Hurley, Chief, Division of Agriculture  
 W. B. Jenkins, Assistant Chief, Division of Agriculture  
 Bureau of Agricultural Economics:  
 W. F. Callander, Assistant Chief  
 Earl E. Houseman, Statistical Assistant, Office of the Chief

Several subcommittees consisting of technical specialists in their respective fields, selected from personnel of the Bureau of the Census and from the various Bureaus of the United States Department of Agriculture, performed much of the detailed work and analysis of problems and recommended procedures for the handling of these problems in the 1950 Census.

The wording of the inquiries on the questionnaire, and the practicability of the procedures to be used in the census, were tested during a series of pretests. The first of these pretests was made in April 1948. This pretest included all the farms in two counties in Missouri and a sample of approximately 2,700 farms in 33 other counties scattered throughout the United States.

The second pretest was made in October 1948 and included all the farms in Carroll and Oldham Counties, Ky., Putnam County, Ill., and Union County, Ind. The third pretest was made in May 1949 and included all the farms in Edgefield County, S. C., and Stephens County, Ga., and a sample of approximately 2,500 farms in approximately 63 other counties scattered throughout the United States. A final test of the training materials and instructions was conducted in October 1949 in Person and Wake Counties, N. C.

Table 1.—AVERAGE DATE OF ENUMERATION BY REGIONS, DIVISIONS, AND STATES: 1950 CENSUS OF AGRICULTURE

Region, division, and State	Approximate average date of enumeration	Percent of farms enumerated during—					Region, division, and State	Approximate average date of enumeration	Percent of farms enumerated during—					
		April 14 and earlier	April 15 to 28	April 29 to May 12	May 13 to June 2	June 3 and later			April 14 and earlier	April 15 to 28	April 29 to May 12	May 13 to June 2	June 3 and later	
U.S.....	Apr. 15-Apr. 28	57	29	9	4	1	South Atlantic:							
The North....	Apr. 15-Apr. 28	62	25	8	4	1	Del.....	Apr. 15-Apr. 28	52	38	7	1	2	
The South....	Apr. 15-Apr. 28	53	33	10	3	1	Md.....	Apr. 15-Apr. 28	50	28	13	7	2	
The West....	Apr. 15-Apr. 28	51	30	11	5	2	D.C.....	May 13-June 2	39	.....	.....	.....	61	
Geo. Division:							Va.....	Apr. 15-Apr. 28	52	32	11	4	1	
New England.....	Apr. 15-Apr. 28	60	22	10	6	2	W.Va.....	Apr. 15-Apr. 28	52	32	10	5	1	
Middle Atlantic.....	Apr. 15-Apr. 28	60	26	10	3	1	N.C.....	Apr. 15-Apr. 28	46	38	12	4	( <sup>1</sup> )	
E.N. Central.....	Apr. 15-Apr. 28	64	24	8	3	1	S.C.....	Apr. 15-Apr. 28	48	36	12	4	( <sup>1</sup> )	
W.N. Central.....	Apr. 15-Apr. 28	62	26	8	4	1	Ga.....	Apr. 15-Apr. 28	53	36	9	2	1	
South Atlantic.....	Apr. 15-Apr. 28	49	35	11	4	1	Fla.....	Apr. 15-Apr. 28	43	30	15	7	5	
E.S. Central.....	Apr. 15-Apr. 28	53	34	10	3	( <sup>1</sup> )	East South Central:							
W.S. Central.....	Apr. 15-Apr. 28	58	29	9	3	1	Ky.....	Apr. 15-Apr. 28	53	32	10	4	1	
Mountain.....	Apr. 15-Apr. 28	51	34	10	4	1	Tenn.....	Apr. 15-Apr. 28	54	34	9	2	( <sup>1</sup> )	
Pacific.....	Apr. 15-Apr. 28	52	26	12	6	3	Ala.....	Apr. 15-Apr. 28	53	33	11	3	( <sup>1</sup> )	
New England:							Miss.....	Apr. 15-Apr. 28	51	35	11	3	( <sup>1</sup> )	
Maine.....	Apr. 15-Apr. 28	64	20	11	5	1	West South Central:							
N.H.....	Apr. 15-Apr. 28	60	22	10	5	3	Ark.....	Apr. 15-Apr. 28	59	30	7	3	( <sup>1</sup> )	
Vt.....	Apr. 15-Apr. 28	64	23	9	4	1	La.....	Apr. 15-Apr. 28	49	33	13	5	1	
Mass.....	Apr. 15-Apr. 28	55	23	11	8	2	Okla.....	Apr. 1-Apr. 14	65	26	6	2	1	
R.I.....	Apr. 15-Apr. 28	51	19	11	14	5	Tex.....	Apr. 15-Apr. 28	57	28	10	4	2	
Conn.....	Apr. 15-Apr. 28	57	24	10	7	2	Mountain:							
Middle Atlantic:							Mont.....	Apr. 15-Apr. 28	56	23	11	8	1	
N.Y.....	Apr. 15-Apr. 28	60	26	10	3	1	Idaho.....	Apr. 15-Apr. 28	61	29	7	2	( <sup>1</sup> )	
N.J.....	Apr. 15-Apr. 28	50	24	12	7	6	Wyo.....	Apr. 15-Apr. 28	54	26	10	8	2	
Pa.....	Apr. 15-Apr. 28	60	27	9	3	1	Colo.....	Apr. 15-Apr. 28	42	48	7	2	1	
East North Central:							N.Mex.....	Apr. 15-Apr. 28	52	30	13	4	1	
Ohio.....	Apr. 15-Apr. 28	61	25	9	4	1	Ariz.....	Apr. 15-Apr. 28	52	27	13	7	2	
Ind.....	Apr. 15-Apr. 28	61	26	9	3	1	Utah.....	Apr. 15-Apr. 28	45	36	14	4	1	
Ill.....	Apr. 1-Apr. 14	66	23	8	3	1	Nev.....	Apr. 15-Apr. 28	50	33	13	3	( <sup>1</sup> )	
Mich.....	Apr. 15-Apr. 28	59	25	11	5	2	Pacific:							
Wis.....	Apr. 1-Apr. 14	71	22	5	1	( <sup>1</sup> )	Wash.....	Apr. 15-Apr. 28	57	27	12	4	1	
West North Central:							Oreg.....	Apr. 15-Apr. 28	60	25	10	3	2	
Minn.....	Apr. 15-Apr. 28	64	24	7	4	1	Calif.....	Apr. 15-Apr. 28	46	26	13	9	5	
Iowa.....	Apr. 1-Apr. 14	71	22	5	2	( <sup>1</sup> )								
Mo.....	Apr. 15-Apr. 28	62	27	8	3	1								
N.Dak.....	Apr. 15-Apr. 28	50	21	6	15	8								
S.Dak.....	Apr. 15-Apr. 28	52	28	10	8	2								
Nebr.....	Apr. 1-Apr. 14	61	30	6	2	( <sup>1</sup> )								
Kans.....	Apr. 15-Apr. 28	55	29	12	4	1								

<sup>1</sup>0.5 percent or less.

**Measures for insuring completeness of enumeration.**—Plans for the 1950 Census of Agriculture included several provisions for insuring the completeness of the coverage of the census of agriculture.

First, the census of agriculture was taken in conjunction with the censuses of population and housing. The questionnaire used for the 1950 Census of Population contained two possible inquiries for every family enumerated. One of these questions was, "Is this house on a farm?" In case the answer to this inquiry was "No," the second inquiry, "Is this house on a place of three or more acres?" was asked. If the answer to either of these questions was "Yes," the census enumerator was instructed to obtain an Agriculture Questionnaire (Form A-1) from the person in charge of the place. This procedure was used in order to insure the enumeration of places not locally considered as farms, but with sufficient agricultural production to qualify as farms according to the Census criteria. The use of these questions resulted in the securing of a considerable number of questionnaires for places that were not counted as farms. (See "Effect of change in the definition of farm.")

Second, enumerators in rural areas were instructed to indicate on their maps the location of every dwelling place and farm. This procedure was intended to assist crew leaders and supervisors in determining that enumerators had visited all places in the enumeration districts assigned to them.

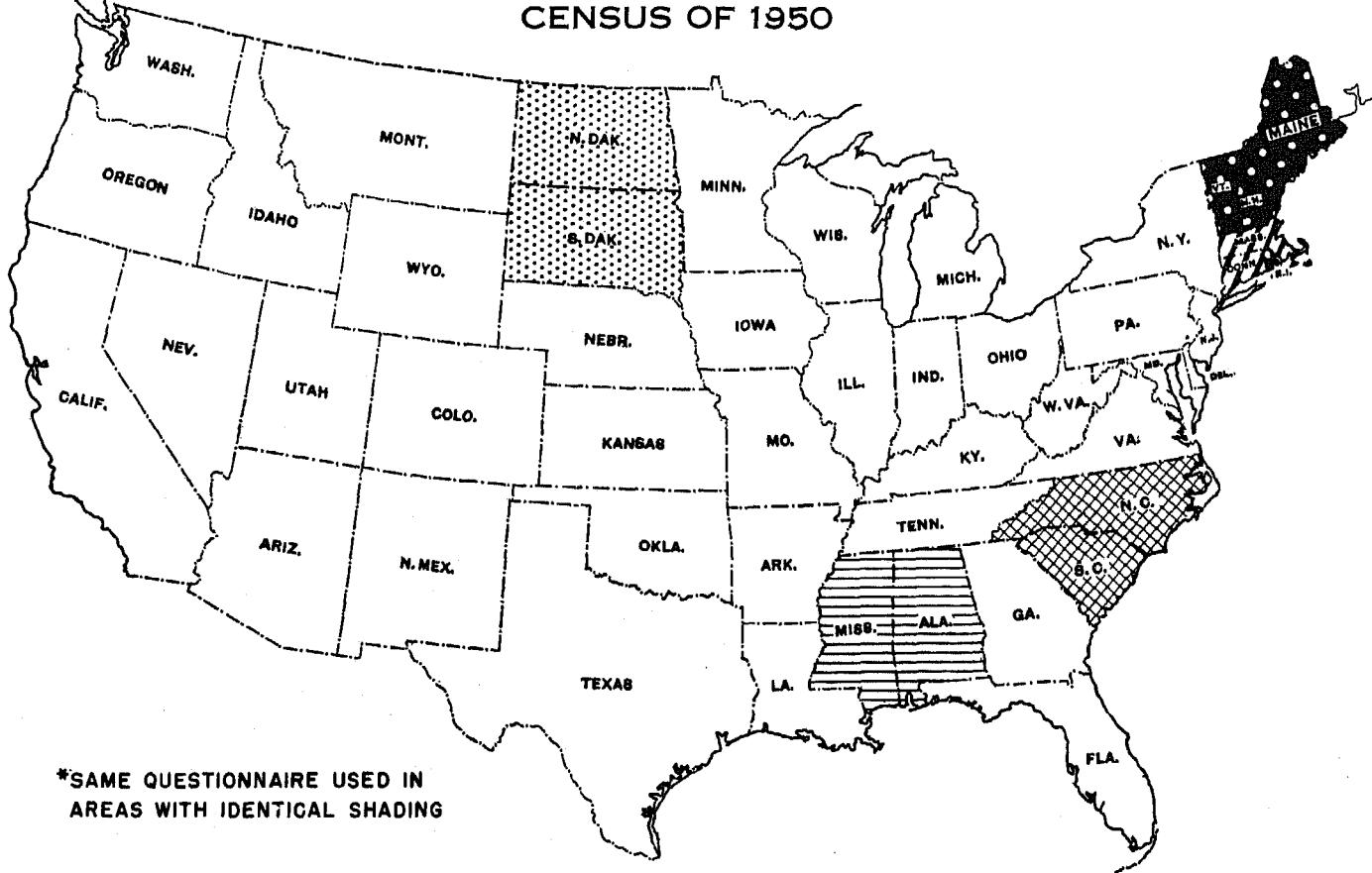
Third, prior to the census, lists of large farms were prepared from the records of the 1945 Census of Agriculture and from records obtained from members of the field staff of the Bureau of Agricultural Economics, U. S. Department of Agriculture. Copies of these lists of large farms were given to census supervisors who were required to check that each farm on the list had been enumerated. The questionnaires obtained for large farms were checked against the list of large farms during the processing in

the Washington office. A questionnaire or a satisfactory explanation as to why a questionnaire was not required was obtained for every large farm on the large farm list. (See "Large farms," "page XXXII.)

Fourth, in most of the counties in the South, a special supplementary questionnaire, the Landlord-Tenant Operations Questionnaire (Form A-3), aided in the enumeration of cropper and other tenant farms comprising parts of larger landholdings, plantations, etc. This questionnaire was required when two or more agriculture questionnaires were needed for a landholding. Enumerators were required to list the name of the landlord and also each cropper and other tenant and to give for each listing the information called for on the questionnaire. The procedure used for filling this questionnaire enabled the enumerator to check to determine that all parts of the landholding were enumerated completely and only once.

**Questionnaires.**—Three different questionnaires were used in connection with the 1950 Census of Agriculture. The Agriculture Questionnaire (Form A-1) was used for the enumeration of all farms. Forty-one separate questionnaires were used for the United States. Each of these questionnaires was used in a State or a group of States. A facsimile of the questionnaire and a composite questionnaire showing the variations in the questionnaire from State to State are given in the Appendix. The use of a separate questionnaire for each State or group of States was initiated in 1940 and was continued in the 1945 and 1950 Censuses of Agriculture. However, a much larger number of separate questionnaires was used in 1950 than in the previous two censuses. The accompanying maps show the States or groups of States for which separate questionnaires were used for the 1950, 1945, and 1940 Censuses of Agriculture. The use of State questionnaires for the 1950 Census of Agriculture reduced the number of questions in many States and eliminated the need for

**AREAS\* FOR WHICH SEPARATE AGRICULTURE QUESTIONNAIRES WERE USED: CENSUS OF 1950**



\*SAME QUESTIONNAIRE USED IN AREAS WITH IDENTICAL SHADING

41 SEPARATE QUESTIONNAIRES WERE USED, ONE FOR EACH STATE OR GROUP OF NEARBY STATES. STATES FOR WHICH THE SAME QUESTIONNAIRE WAS USED ARE INDICATED BY PATTERNS.



the farmer or the enumerator to read many questions that did not apply to his farm or area. State questionnaires also provided for the asking of separate questions regarding crops that were important only in the State. The questionnaires were of the interview type. Most of the questions were stated completely and exactly as the enumerator was expected to ask them. This was the first time that an interview type of questionnaire had been used for the census of agriculture. The questionnaire contained the essential instructions needed for filling it out. The inquiries were grouped so that a general question could be asked regarding the presence of a group of items on a farm and if none of these items occurred on the farm, then it was possible for the enumerator and the farmer to skip the detailed inquiries pertaining to that group.

The Special Agriculture Questionnaire (Form A-2) was used in urban areas for the purpose of determining whether an Agriculture Questionnaire (Form A-1) should be filled for the place. This questionnaire was designed for the purpose of minimizing the amount of instructions needed for enumerators working in urban areas. After the enumerator had completed the enumeration of urban districts and turned in his questionnaires, each Form A-2 was examined to determine whether or not the place covered by the questionnaire required the filling of an Agriculture Questionnaire (Form A-1). If a Form A-2 indicated that an Agriculture Questionnaire was required, a specially trained census enumerator was then sent to obtain the required information on an Agriculture Questionnaire (Form A-1).

In 977 counties in the South, a special questionnaire (Form A-3) was used for the enumeration of landlord-tenant operations. The enumerator was required to fill one of these questionnaires for any landholding requiring two or more agriculture questionnaires. This questionnaire was designed for the purpose of insuring a complete and accurate coverage of tenant and other farms in the South and also to provide information for special tabulations for multiple-unit operations in the Southern States. A more detailed description of this questionnaire and of statistics compiled through its use appears in part 2 of Volume V of the reports of the 1950 Census of Agriculture.

**The enumeration.**—The enumeration was performed by farm operators and census enumerators. About 2 weeks prior to the census date of April 1, 1950, a copy of the agriculture questionnaire was distributed to 8,650,000 box-holders in rural areas and to box-holders in other areas not having city-type mail delivery. These questionnaires were distributed in all States except North Carolina, South Carolina, Georgia, Alabama, Mississippi, Louisiana, and 65 of the 75 counties in Arkansas. The copy of the agriculture questionnaire was accompanied by a letter asking farm operators to examine the questionnaire and to answer as many of the questions as possible prior to the visit of the census enumerator. This advance distribution of questionnaires was designed to help both the farm operator and the enumerator, and to obtain more accurate information than in former censuses. Enumerators were required to visit each farm to pick up, complete, or fill the agriculture questionnaire, and to obtain the information required for the census of population and housing. This advance distribution of questionnaires enabled farm operators to become familiar with the kinds of information required for the census and also enabled them to check their records prior to the visit of the census enumerator and to compile any data needed for answering the inquiries on the questionnaire. When the questionnaire was filled out by the farm operator, the census enumerator was required to examine the questionnaire for the purpose of insuring that all necessary entries had been made. Records compiled for a sample of 40 areas distributed throughout the United States showed that approximately one-sixth of the farm operators had completed the filling of their questionnaire and that 24 percent of the farm operators had partially filled their questionnaires by the time of the visit of the census enumerator.

Census enumerators and their supervisors received specialized training prior to the actual beginning of the census. There was 1 local supervisor or crew leader for approximately every 14 enumerators. These crew leaders were given 16 hours of special training in regard to the census of agriculture by means of film strips, recordings, tests, etc. In addition, they were employed for 7 to 12 days for the purpose of checking the boundaries of enumeration districts, recruiting enumerators, and getting acquainted with the area to be enumerated by enumerators under their supervision. Each crew leader provided 8 hours of instruction in regard to the census of agriculture for the enumerators whom he supervised. This special training was given by the use of film strips, the practice filling of agriculture questionnaires, the conduct of a trial interview, and some actual enumeration. Crew leaders were required to visit each of the enumerators to check a sample of the work that had been completed, and to give any additional instructions that appeared to be needed.

In general, census enumerators were assigned areas for which they could complete the enumeration within 4 weeks. The number of farms enumerated by an enumerator averaged approximately 100. Census enumerators began their enumeration on April 1 and continued until the completion of the enumeration of their assigned areas. The enumerator gave the agriculture questionnaires for the area he had enumerated to his crew leader who checked them for completeness before recommending the payment of the enumerator for his work. In approximately 2,700 counties, enumerators were paid a fixed fee for each agriculture questionnaire filled plus 5 cents per mile for the use of their automobiles plus a wage of approximately \$1 per hour for the time spent in training sessions. In 307 counties, where farms were widely scattered or travel conditions were difficult, enumerators were paid at an hourly rate for enumeration work and training plus 5 cents per mile for the use of their automobiles.

Enumerators in urban areas were not given detailed instructions regarding the taking of the census of agriculture. They were given brief instructions regarding the filling of the short questionnaire, Form A-2 (see Appendix for facsimile), in case they found a farm or a place containing 3 or more acres in their enumeration districts. Form A-2 questionnaires filled out by enumerators in urban areas were examined by crew leaders or in the District Supervisor's office, and enumerators who had received full instructions regarding the census of agriculture were sent to obtain Agriculture Questionnaires (A-1) for the A-2 questionnaires filled for a farm or for a place of 3 or more acres with agricultural operations. In order to assist supervisors and crew leaders in checking the completeness of the enumeration of places which would qualify as farms in urban areas, a list of approximately 70,000 establishments engaged in the production of flowers, mushrooms, nursery products, etc., was furnished them. Approximately 200,000 A-2 questionnaires were filled by census enumerators. Agriculture questionnaires representing farms (A-1) were obtained for approximately 60 percent of the A-2 questionnaires.

#### OFFICE PROCESSING

In order to compile the statistics contained in the various reports for the 1950 Census of Agriculture from the questionnaires, it was necessary to perform a series of processing operations in the Washington office. These processing operations were handled as follows:

**Receiving and packaging of questionnaires.**—The agriculture questionnaires were received from the District offices arranged by counties and enumeration districts within counties. The questionnaires in each county were then arranged by minor civil divisions within the county, counted, and placed in properly labeled cardboard portfolios containing approximately 400 questionnaires each. Questionnaires were kept in this arrangement

and the portfolios of questionnaires for a county formed a unit of work for all subsequent processing operations.

**Editing and coding.**—Each individual agriculture questionnaire was examined by editing clerks during the office processing. The questionnaires were checked to see that they represented Census farms, that the information was completely reported, and that the figures were legible and were reported in the required units. Codes for various items were entered for the purpose of facilitating the entry on punch cards of figures necessary for the making of cross-classifications of the data. Questionnaires that appeared not to represent Census farms were selected by the editing clerk for reference to technical personnel for final review, and questionnaires that represented large farms were referred to the technical personnel for complete review. The editing clerk also made checks to see that the data were completely and accurately reported. For example, the acreages of the various crops were totaled and the total was compared with the acreage of cropland harvested; the numbers of cattle for each age and sex group were added and the total compared with the total number of cattle. Reports of cents for questions for which the entry was to be in whole dollars were canceled. Likewise reports of fractions of acres for questions for which the entry was to be given in whole acres were corrected.

During the editing, codes were entered on the questionnaire for color of the operator, for tenure of the operator, for size of farm, for irrigation (only in 17 Western States and Arkansas, Louisiana, and Florida), and for economic class of farm and type of farm. The detailed codes for economic class of farm and for type of farm were entered only for a sample of approximately 20 percent of the questionnaires. The work of each editing and coding clerk was reviewed completely until the work was found to be of acceptable quality and thereafter only on a sample basis, unless the quality of the work did not meet the established quality standard.

**Punching.**—The information for the 1950 Census of Agriculture required a total of 13 punch cards. The column headings for the punch cards are shown in the accompanying chart, and the number of cards punched is given in table 2. The accuracy of the punching was verified by verifying machines. The work of each punching-machine operator was completely verified until the work was of acceptable quality and thereafter only on a sample basis, unless the sample indicated that the quality of the punching was not acceptable. The punching of approximately 20 percent of the cards for the 1950 Census of Agriculture was verified.

TABLE 2.—NUMBER OF PUNCH CARDS SELECTED BY MECHANICAL EDIT FOR FURTHER VERIFICATION, BY CARD TYPE, FOR THE UNITED STATES: 1950 CENSUS OF AGRICULTURE

Card type	Total number of cards (thousands)	Cards selected by mechanical edit	
		Number (thousands)	Percent of total cards
All cards.....	58,211	4,222	7.3
Land ownership and use:			
A (East).....	3,705	139	3.7
A (West).....	1,719	52	3.0
Irrigation:			
A-2.....	316	13	4.1
Crops:			
C.....	3,744	662	17.7
E.....	29,459	1,805	6.1
F.....	288	62	21.5
Forest products:			
G.....	1,524	77	5.1
Livestock and livestock products:			
H.....	4,463	471	10.6
I.....	4,510	311	6.9
J.....	601	91	15.1
K.....	4,388	135	3.1
N.....	34	9	26.8
Mortgage debt, taxes, farm facilities and equipment, farm labor and expenditures:			
B.....	1,148	244	21.2
L.....	1,170	69	5.9
M.....	1,182	82	7.2

**Mechanical editing.**—The punch cards were examined by means of electric statistical machines for the purpose of selecting cards that might be in error. Specifications for the selection of cards that might be in error varied from card to card. The specifications for selecting cards for further verification provided for the selection of cards with a large entry for a single item; cards on which the ratio of the punched amount for one item to the punched amount for another item appeared unreasonable, (for example, a crop production of more than 100 units per acre for crops such as corn, wheat, etc.), cards with amounts inconsistent with codes on the same card; cards with essential information missing; and all cards for large farms. The number of cards selected by mechanical editing for each type of card is given in table 2. The information on cards selected by mechanical edit was listed and these listings were checked by clerks working under the direction of technical personnel and cards were corrected when in error.

**Tabulation.**—The tabulation was performed by means of electric tabulators. The tabulations were divided into two series, one series for counties and the other for State economic areas. In most cases, the tabulations were made to obtain totals and counts for all items for each county. These tabulations were made by using punch cards for all farms in the county. The tabulations for counties usually provided totals for each minor civil division comprising the county. The tabulations for a few items and, in general, all cross-tabulations such as those by size of farm, type of farm, etc., were made only for State economic areas. Usually for these tabulations, only cards for a sample of approximately 20 percent of the farms were used.

**Review of tabulations.**—All tabulations were reviewed by technical personnel. This review included comparisons with data for prior censuses or with data from other sources; a checking of data for one item against those for another item (for example, the checking of acres against production for a crop); the comparisons of totals and averages for an area with those for nearby areas or minor civil divisions, etc.; the checking of the totals for one tabulation with the totals for other tabulations for the same item; etc. Part of this checking was performed by the technical staff of the Agriculture Division and part by the State Statisticians of the various States loaned to the Bureau of the Census by the Bureau of Agricultural Economics of the U. S. Department of Agriculture.

**Processing of data for the sample for the 1950 Census.**—The sample used for the 1950 Census of Agriculture consisted of all large farms and one-fifth of all remaining farms. Farms to be included in the sample were selected during the enumeration. The Census enumerator was given a procedure for selecting the farms to be included in the sample and he was instructed not to modify this procedure in any case. He was instructed to include in the sample and to obtain the additional information (answers to questions 306 through 332) for any farm if the questionnaire on which it was to be enumerated had a designated serial number. All agriculture questionnaires given to Census enumerators, as well as those distributed through the mail, carried a serial number. These serial numbers ranged from 1 through 5. The designated serial number of the questionnaire for which the sample information was to be obtained was determined by comparing the serial number of the agriculture questionnaire with the serial number assigned in Washington to the enumeration district.

Crew leaders were instructed to see that the additional information required for farms in the sample was obtained for all farms on the large farm list. During the processing operations in Washington any farm not already in the sample that met the criteria for a large farm was added to the sample and if the necessary information for items to be obtained only for farms in the sample had not been secured, the required data were obtained by mail.

PUNCH CARDS USED FOR THE 1950 CENSUS OF AGRICULTURE

[The figures appearing in parentheses ( ) under the column heads on the punch card indicate the question number on the agriculture questionnaire from which the figures were taken for punching the card]

Land ownership and use

A EAST	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	AGE OF OPERATOR	LAND OWNED (ACRES)	LAND RENTED FROM OTHERS (ACRES)	LAND IN FARMS (ACRES)								IRRIGATED LAND (ACRES)			
												TOTAL	CROPLAND			WOODLAND		OTHER PASTURE	OTHER LAND	TOTAL	BY SPRINKLER		
													HARVESTED	PASTURED	OTHER	PASTURED	NOT PASTURED						
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

A WEST	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	AGE OF OPERATOR	LAND OWNED (ACRES)	LAND RENTED FROM OTHERS (ACRES)	LAND IN FARMS (ACRES)								IRRIGATED LAND (ACRES)			
												TOTAL	CROPLAND			WOODLAND		OTHER PASTURE	OTHER LAND	TOTAL	BY SPRINKLER		
													HARVESTED	PASTURED	CULTIVATED FALLOW	OTHER	PASTURED					NOT PASTURED	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

Irrigation

A WEST	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	IRRIGATION	IRRIGATED LAND (ACRES)							BY SPRINKLER						
										TOTAL	CROPLAND HARVESTED	WILD GRASS PASTURE	TAME GRASS PASTURE	OTHER CROPLAND	SOURCE CODE	SUPPL. SOURCE							
																		(222)	(223)	(224A)	(224B)	(225)	(229)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

(A-West and Irrigation used only in 17 Western States, Arkansas, Florida, and Louisiana)

Crops

C	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	IRRIGATION	CORN OR SORGHUMS HARVESTED FOR ALL PURPOSES													
										TOTAL IN ACRES	ACRES		PRODUCTION		ACRES		PRODUCTION		VALUE OF SALES				
											(118) or (24)	(119) or (25)	(120) or (26)	(121) or (27)	(122) or (28)	(123) or (29)	(124) or (30)	(125) or (31)					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

E	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	IRRIGATION	AREA, TREES, QUANTITY SOLD, VALUE OF SALES			AREA, TREES, QUANTITY SOLD, VALUE OF SALES			AREA, TREES, QUANTITY SOLD, VALUE OF SALES							
										(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

F	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	IRRIGATION	TRES NOT OF BEARING AGE			TRES OF BEARING AGE			PRODUCTION							
										(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

(F card used only in California)

Forest products

G	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	CLASS	TYPE	IRRIGATION	VALUE OF STANDING TIMBER SOLD	FIREWOOD CUT (CORDS)	FENCE POSTS CUT (NUMBER)	SAWLOGS AND VENEER LOGS CUT (BD. FT.)	PULPWOOD CUT (CORDS)	PILING AND POLES CUT (NUMBER)	VALUE OF FIREWOOD LOGS, ETC. SOLD	VALUE OF OTHER FOREST PRODUCTS SOLD	MAPLE TREES AND SIRUP					
																		TREES TAPPED	GALS. OF SIRUP	LBS. OF SUGAR	VALUE OF SIRUP OR SUGAR SOLD		
																						(239)	(240)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	(u)	(v)	(w)	(x)

GENERAL REPORT

PUNCH CARDS USED FOR THE 1950 CENSUS OF AGRICULTURE—Continued

Livestock and livestock products

H	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	CATTLE ON HAND					MILK COWS ON HAND	MILK PRODUCED YESTERDAY	BUTTER PRODUCED LAST WEEK	WHOLE MILK SOLD		CREAM SOLD		AMT. REC'D FROM SALE OF OTHER DAIRY PRODUCTS					
											TOTAL	COWS	CALVES	HEIFERS	BULLS AND STEERS				QUANTITY	VALUE OF SALES	POUNDS OF BUTTERFAT	VALUE OF SALES						
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(243)	(244)	(245)	(246)	(247)	(248)	(249)	(250)	(251)	(252)	(253)	(254)	(255)	(256)	(257)	(258)	(259)	(260)

I	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	HOGS AND PIGS ON FARM		SOWS		ANIMALS SOLD ALIVE					FARM SLAUGHTER											
											TOTAL	LESS THAN 4 MOS. OF AGE	4 MOS. OF AGE AND OVER	NO.	VALUE OF SALES	NO.	VALUE OF SALES	NO.	VALUE OF SALES	NO.	VALUE OF SALES	NO.	VALUE OF SALES	HOGS & PIGS - NO.	CALVES - NO.	GOATS - NO.	SHEEP & LAMBS - NO.				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(257)	(258)	(259)	(274)	(275)	(276-1)	(276-2)	(277-1)	(277-2)	(278-1)	(278-2)	(279-1)	(279-2)	(280-1)	(280-2)	(281)	(282)	(283)	(284)	(285)	(286)

J	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	SHEEP AND LAMBS				OTHER LIVE STOCK	VALUE OF GOATS MILK MOHAIR, RABBITS OR FUR ANIMALS SOLD	SHEEP SHORN—WOOL		
											TOTAL	UNDER 6 MONTHS	YEARLING EWES	OLDER EWES			RAMS & WETHERS	NUMBER	WOOL PRODUCED (LBS)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(260)	(261)	(262A)	(262B)	(262C)	(263)	(264)	(265)	(266)

K	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	CHICKENS 4 MOS. & OVER NO. ON HAND	CHICKENS SOLD		CHICKEN EGGS SOLD		TURKEYS RAISED (NUMBER)	TURKEYS ON HAND (NUMBER)	OTHER POULTRY RAISED	AMT. REC'D FROM OTHER POULTRY & PROD. SOLD	BEES OWNED LAST YEAR		
												NUMBER	VALUE OF SALES	DOZENS	VALUE OF SALES	NUMBER	NUMBER	NUMBER		NO. OF HIVES	HONEY PRODUCED (LBS.)	VALUE OF HONEY, WAX, BEES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(295)	(296)	(297)	(297)	(298)	(299)	(300)	(301)	(302)	(303)	(304)	(305)

N	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	GOATS AND KIDS			POUNDS OF MOHAIR	VALUE OF GOATS MILK & MOHAIR SOLD	
											TOTAL	ANGORA	OTHER			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(264)	(265)	(266)	(267)	(268)	(269)

(N card used only in Arizona, California, Missouri, New Mexico, Oregon, Texas, and Utah)

Mortgage debt, taxes, farm facilities and equipment, farm labor and expenditures

B	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	LAND OWNED		MORTGAGE DEBT		TAXES		LAND RENTED FROM OTHERS OR MANAGED FOR OTHERS		CASH RENT PAID	LAND RENTED TO OTHERS		TOTAL LAND	CROPLAND HARVESTED
											ACRES	VALUE OF LAND AND BUILDINGS	AMOUNT	TOTAL	REAL ESTATE	ACRES	VALUE OF LAND AND BUILDINGS	ACRES	VALUE OF LAND AND BUILDINGS	ACRES	VALUE OF LAND AND BUILDINGS	(ACRES)	(ACRES)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(326)	(326A)	(327)	(328)	(328A)	(329 OR 331)	(329A OR 331A)	(330)	(332)	(332A)	(333)	(334)	

L	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	FARM FACILITIES AND EQUIPMENT										DISTANCE TO TRAINING CENTER	CROPLAND HARVESTED	HORSES AND MULES	TOTAL VALUE OF PRODUCTS	DATE OF ENUMERATION			
											ELECTRICITY—EQUIPMENT					MOTOR TRUCKS		WHEEL TRACTORS		GARDEN TRACTORS						CRAWLER TRACTORS		AUTOS
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(308)	(309)	(310)	(311)	(312)	(313)	(314)	(315)	(316)	(317)	(318)	(319)	(320)	(321)	(322)	(323)	(324)	(325)

M	STATE	COUNTY	MINOR CIVIL DIVISION	QUESTION-NAIRE NUMBER	COLOR	TENURE	SITE	CLASS	TYPE	IRRIGATION	LABOR					SPECIFIED EXPENDITURES—DOLLARS											
											TOTAL	PER PERSON	RATE	HOURS WORKED	MACHINE HIRE	HIRE LABOR	FEED FOR LIVESTOCK & POULTRY	PURCHASE OF LIVESTOCK & POULTRY	GASOLINE & OTHER FUEL OILS	SEEDS, BULBS, PLANTS, TREES	TRACTOR REPAIRS	OTHER MACHINERY REPAIRS					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(332)	(333)	(334)	(335)	(336)	(337)	(338)	(339)	(340)	(341)	(342)	(343)	(344)	(345)	(346)	(347)	(348)

(B, L, and M cards were used only for farms comprising the sample)

An adjustment in the sample was made for the purpose of (1) improving the reliability of the estimates from the sample by a process essentially equivalent to stratifying the farms in the sample by size and economic class of farm and (2) reducing biases introduced because Census enumerators did not follow perfectly the method outlined for selecting the farms in the sample.

In order to check that the sampling procedure had been followed during the office processing, questionnaires were separated into three groups—large farms, other farms in the sample, and farms not in the sample. For each county, the percent of the total number of nonlarge farms in the sample was computed, and this percent was compared with the expected range in the percentage of number of questionnaires in the sample. The expected range in the percentage of farms in the sample for counties of various size as measured by the number of farms is shown by the accompanying chart. When the number of farms in the sample did not fall within the expected range, adjustments were made by decreasing the number of farms in the sample by eliminating questionnaires selected at random from those in the sample or by increasing the number of farms by adding questionnaires selected at random from the group of nonlarge farms not in the sample. This preliminary adjustment was required for approximately 200 counties.

In general, enumerators had a tendency to include the larger and better farms in the sample. Analyses indicated that more reliable estimates would be obtained if the farms in the sample were in effect stratified by size and by economic class before the estimates were prepared on the basis of the sample. This final adjustment was made at the economic area level rather than at the county level.

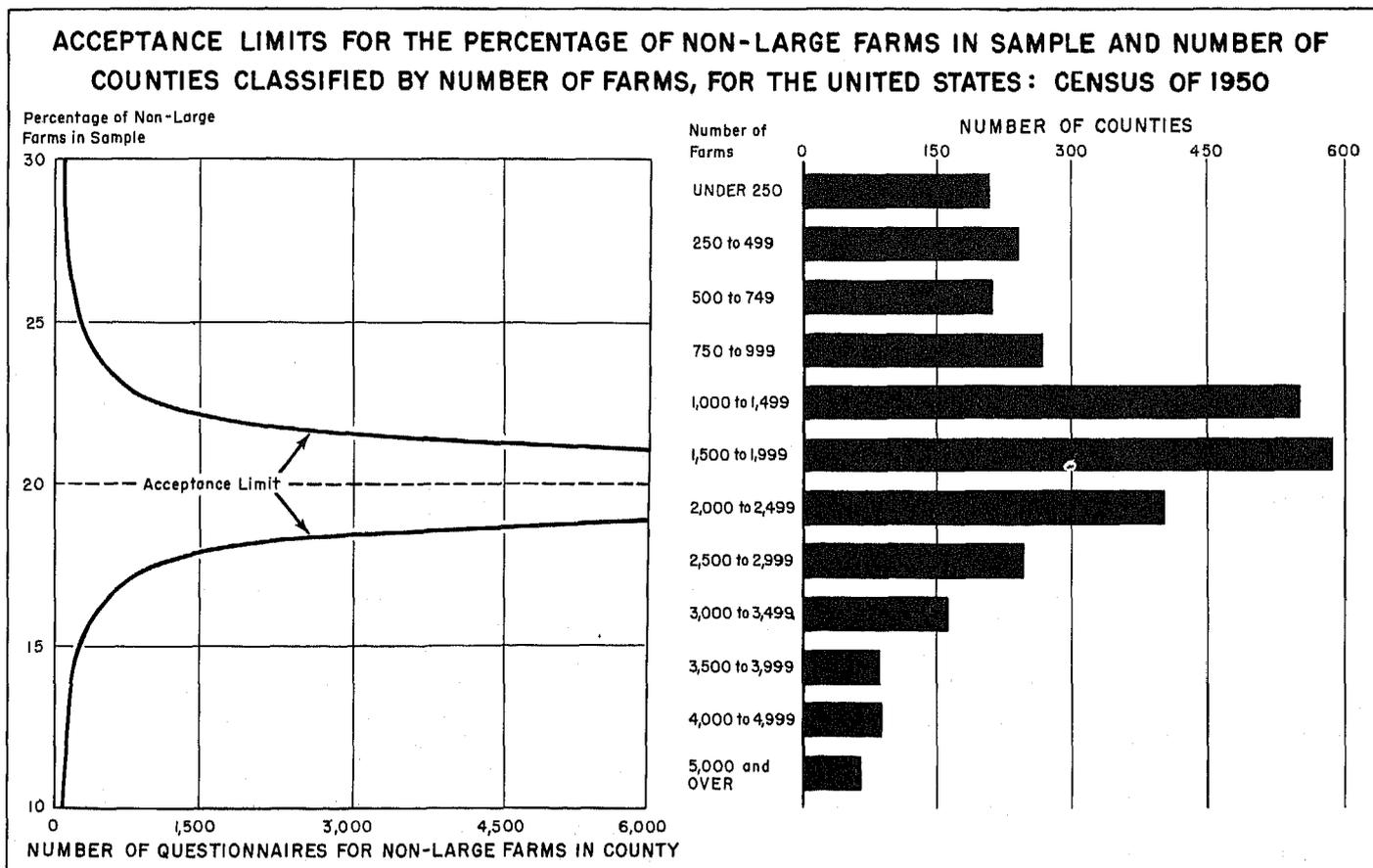
In order to adjust the sample for each economic area, counts were obtained of all farms and of sample farms by size and economic class groups.

The corresponding counts for the sample were then compared with the number to be expected for the sample (the total count for all farms divided by 5) and an adjustment was made so that the sample count equaled its expected value. Adjustments were made in the sample by eliminating farms when too many were included for a specified class in an economic area or by duplicating farms when too few were included. The farms eliminated or duplicated for a class were selected at random from counties over- or under-represented in the class. The gross adjustments involved were relatively small in most areas, averaging 3 percent eliminated and 2 percent duplicated for all areas in the United States. These adjustments are summarized in table 3.

This adjustment procedure achieved most of the reduction in the sampling errors of the estimates for State economic areas that could have been realized by a more complicated method of estimation by which separate totals would be tabulated by size and economic class groups, estimates prepared group by group on the basis of the actual sampling ratio in the group, and the group estimates combined to provide the estimates for the economic area. This adjustment procedure also tended to reduce the effects of possible biases introduced by failure of some enumerators to follow strictly the rules for selecting the sample farms.

Reliability of estimates based on the sample of farms.—The figures based on the tabulation of data for only a sample of farms are subject to sampling errors. When data based on only a sample of farms are shown in the same table with enumerated data for all farms, the data based on a sample are shown in italics or a note indicates that the data are estimates based on a sample of farms. Approximate measures of the sampling reliability of estimates are given in tables 5, 6, and 7 for farms reporting and for item totals.

These measures indicate the general level of sampling reliability.



**TABLE 3.—ADJUSTMENTS IN NUMBER OF FARMS PRIOR TO TABULATION OF DATA FOR THE SAMPLE, FOR THE UNITED STATES AND REGIONS: 1950 CENSUS OF AGRICULTURE**

Item	United States	The North	The South	The West
Total counties.....number.....	3,101	1,273	1,416	412
Counties adjusted.....number.....	2,092	887	949	256
.....percent.....	67.5	69.7	67.0	62.1
<b>Total farms, excluding large farms.....number.....</b>	<b>5,310,834</b>	<b>2,248,848</b>	<b>2,624,402</b>	<b>437,584</b>
Expected number of farms in sample.....number.....	1,062,167	449,770	524,880	87,517
Farms enumerated in sample.....number.....	1,071,041	455,729	528,647	86,665
Difference between expected and enumerated number of farms in sample.....number.....	8,874	5,959	3,767	-852
.....percent <sup>1</sup> .....	0.8	1.3	0.7	1.0
Net adjustment in number of farms in sample.....number.....	-9,457	-6,156	-4,091	790
Farms eliminated.....number.....	31,873	15,120	14,594	2,159
.....percent <sup>1</sup> .....	3.0	3.4	2.8	2.5
Farms added.....number.....	22,416	8,964	10,503	2,949
.....percent <sup>1</sup> .....	2.1	2.0	2.0	3.4
Gross adjustment in number of farms in sample.....number.....	54,289	24,084	25,097	5,108
.....percent <sup>1</sup> .....	5.1	5.4	4.8	5.8
<b>Commercial farms, excluding large farms.....number.....</b>	<b>3,635,029</b>	<b>1,752,015</b>	<b>1,584,862</b>	<b>298,752</b>
Expected number of farms in sample.....number.....	727,126	350,403	316,973	59,751
Farms enumerated in sample.....number.....	743,203	359,887	323,420	59,896
Difference between expected and enumerated number of farms in sample.....number.....	16,077	9,484	6,448	145
.....percent <sup>1</sup> .....	2.2	2.7	2.0	0.2
Net adjustment in number of farms in sample.....number.....	-15,601	-9,232	-6,224	-145
Farms eliminated.....number.....	26,739	13,639	11,328	1,772
.....percent <sup>1</sup> .....	3.7	3.9	3.6	3.0
Farms added.....number.....	11,138	4,407	5,104	1,627
.....percent <sup>1</sup> .....	1.5	1.3	1.6	2.7
Gross adjustment in number of farms in sample.....number.....	37,877	18,046	16,432	3,399
.....percent <sup>1</sup> .....	5.2	5.2	5.2	5.7
<b>Other farms, excluding large farms.....number.....</b>	<b>1,675,205</b>	<b>406,833</b>	<b>1,039,540</b>	<b>138,832</b>
Expected number of farms in sample.....number.....	335,041	99,367	207,908	27,766
Farms enumerated in sample.....number.....	327,838	95,842	205,227	26,769
Difference between expected and enumerated number of farms in sample.....number.....	-7,203	-3,525	-2,681	-997
.....percent <sup>1</sup> .....	2.1	3.5	1.3	3.6
Net adjustment in number of farms in sample.....number.....	6,144	3,076	2,133	935
Farms eliminated.....number.....	5,134	1,481	3,266	387
.....percent <sup>1</sup> .....	1.5	1.5	1.6	1.4
Farms added.....number.....	11,278	4,557	5,399	1,322
.....percent <sup>1</sup> .....	3.4	4.6	2.6	4.8
Gross adjustment in number of farms in sample.....number.....	16,412	6,038	8,665	1,709
.....percent <sup>1</sup> .....	4.9	6.1	4.2	6.2

<sup>1</sup> Percent of expected number of farms.

bility of the estimates, but do not include adequate allowances for sources of error other than sampling variations, as for example, errors in original data furnished by farmers. Sources of error other than sampling may be relatively more important than sampling variation, especially for totals for States or larger areas.

In general, the measures of sampling reliability presented are conservative, in that they tend to overestimate the variations in the sample estimates, because, (1) maximum figures intended to serve for all geographic regions were used and (2) the predicted limits of error do not take into consideration that complete data were tabulated for all large farms. Consequently, there is a tendency to overestimate the variations in the sample, especially for groups for which the totals for large farms represent a high percentage of the item totals. Data for large farms for a number of items are given in table 4. The data in this table indicate for each item the proportion of the region total represented by large farms.

The estimated sampling reliability for number of farms and farms reporting specified items is given in table 5. Data in tables 6 and 7 are given to assist in determining the general level of sampling reliability of estimated totals. In table 7, a list of the items is given and the level of sampling reliability as shown in table 6 is indicated. By referring to table 6 in the column for the level of sampling reliability designated in table 7, the sampling error according to the number of farms reporting may be obtained. Tables 5 and 6 show percentage limits, such that the chances are about 2 in 3 that the difference between the estimates based on the sample and the figures that would have been obtained from a tabulation for all farms would be less than the limit specified. However, the chances are 99 in 100 that the difference would be less than two and one-half times the percentage limit given in the table.

The data in tables 5 and 6 indicate that when the number of farms reporting specified items is small, the item totals are subject to relatively large sampling errors. Nevertheless, the complete detail for every classification for each item is presented to insure maximum usefulness for obtaining estimates for any combinations of items that may be desired. Percentage figures and averages derived from the tables will generally have greater reliability than the estimated totals; also significant patterns of relationship may sometimes be observed even though the individual data are subject to relatively large sampling errors.

Sampling errors for farms reporting were computed by the random sampling formula, assuming a random distribution. However, the assumption of a random distribution is not fully correct because of the adjustments made in the sample. While the amount of the sampling error as given could be reduced by the use of a more complicated method of computation, the differences between the results from the method used and the more complicated method would not justify the computation of sampling errors by a more complicated method. Adjustment factors are given in the footnote of table 5 to provide more precise limits when the number of farms or farms reporting an item is greater than 50 percent of the total number of farms.

In order to compute the sampling errors for item totals, State economic areas having similar agricultural and statistical characteristics were grouped together. Twenty such broad groups were selected for the United States. Sample counties from each of the 20 groups were selected and estimates of sampling errors were computed for a large variety of items to provide a basis for estimates of the level of sampling errors. Estimates of sampling errors have been made separately for the North, the South, the West, and the United States totals, by weighting the sampling error by the corresponding item total for each State or geographic region.

All data shown in this report which are based on a sample of farms have been expanded to represent figures for all farms. These expanded figures were obtained by multiplying by five the totals tabulated from the sample for all except the large farms, and adding totals for large farms.

Data on farm facilities and equipment, farm labor, farm expenditures, and value of land and buildings were estimated for each county on the basis of the tabulation of the figures for only a sample of the farms in each county. The same sample of farms was used also for the tabulation of data for these items by State economic areas or for the State. In some cases, the totals compiled for these items from the tabulations made by counties will differ from the totals presented in tables compiled from tabulations made by State economic areas or for States since, as a matter of economy, adjustments were not made in the tabulations

Table 4.—FARMS, FARM CHARACTERISTICS, AND VALUE OF FARM PRODUCTS SOLD, FOR SPECIFIED LARGE FARMS, BY REGIONS: CENSUS OF 1950

Item (For definitions and explanations, see text)	The United States		The North		The South		The West	
	Total	Percent of total for all farms	Total	Percent of total for all farms	Total	Percent of total for all farms	Total	Percent of total for all farms
<b>FARMS, ACREAGE, AND VALUE</b>								
Farms.....number..	71,328	1.3	19,218	0.8	28,021	1.1	24,089	5.2
Land in farms.....acres..	382,992,594	33.1	50,056,337	11.4	118,830,537	30.2	214,105,720	66.0
Value of land and buildings.....average per farm,dollars..	142,383	xxxxxxx	106,079	xxxxxxx	146,014	xxxxxxx	168,789	xxxxxxx
Land in farms according to use, 1949:	26.28	xxxxxxx	33.64	xxxxxxx	30.40	xxxxxxx	21.29	xxxxxxx
Cropland harvested.....farms reporting..	61,696	1.3	18,576	0.9	22,631	1.0	20,489	5.4
acres..	39,427,906	11.4	13,972,397	6.7	10,861,489	11.2	14,594,020	36.6
Cropland used only for pasture.....farms reporting..	27,110	1.3	7,483	0.7	13,192	1.4	6,435	4.4
acres..	11,470,161	16.5	1,876,932	6.5	5,056,908	16.4	4,536,321	48.1
Woodland pastured.....farms reporting..	23,165	1.4	3,664	0.5	16,507	1.8	2,994	4.1
acres..	47,210,883	35.0	1,256,013	4.3	22,629,458	32.6	23,325,412	64.8
Other pasture (not cropland and not woodland).....farms reporting..	39,793	1.9	11,702	1.1	12,700	1.5	15,391	9.5
acres..	247,031,425	59.4	25,779,303	25.6	63,224,990	59.5	158,027,132	75.7
Irrigated land in farms.....farms reporting..	13,788	4.5	1,000	5.5	2,572	6.6	10,216	4.1
acres..	7,956,707	30.9	176,261	14.0	1,340,758	29.5	139,688	32.2
<b>FARMS BY SIZE</b>								
Under 30 acres.....number..	1,256	0.1	483	0.1	217	(1)	556	0.3
30-259 acres.....number..	2,879	0.1	992	0.1	785	(1)	1,102	0.6
260-499 acres.....number..	2,892	0.6	1,037	0.4	941	0.6	914	2.5
500-999 acres.....number..	7,508	4.1	1,869	2.1	4,435	7.3	1,204	3.9
1,000 acres and over.....number..	56,793	46.8	14,837	40.6	21,643	59.6	20,313	41.9
<b>FARMS BY TENURE OF OPERATOR</b>								
Full owners.....number..	22,250	0.7	4,924	0.4	12,360	0.9	4,966	1.6
Part owners.....number..	33,720	4.1	10,430	2.5	9,318	2.9	13,972	16.5
Managers.....number..	7,418	31.5	1,581	18.7	3,872	38.8	1,965	38.4
All tenants.....number..	7,940	0.5	2,283	0.5	2,471	0.3	3,186	5.4
<b>SPECIFIED FACILITIES AND EQUIPMENT</b>								
Grain combines.....farms reporting..	32,937	5.0	11,662	2.5	10,200	8.1	11,075	17.1
number..	50,176	7.0	17,705	3.6	15,712	11.2	16,759	22.3
Corn pickers.....farms reporting..	7,609	1.7	5,099	1.2	2,131	9.5	379	11.4
number..	9,215	2.0	6,214	1.4	2,547	11.0	454	13.2
Pick-up hay balers.....farms reporting..	12,780	6.7	4,001	3.3	5,648	11.2	3,131	17.2
number..	14,221	7.3	4,315	3.5	6,294	12.1	3,612	18.9
Motortrucks.....farms reporting..	62,065	3.4	17,220	2.0	22,692	3.2	22,153	8.6
number..	157,386	7.1	41,716	4.1	53,263	6.5	62,407	17.2
Tractors.....farms reporting..	58,604	2.3	17,652	1.1	21,244	3.1	19,708	7.1
number..	201,774	5.6	59,751	2.6	79,774	8.6	62,249	14.5
<b>FARM LABOR, WEEK PRECEDING ENUMERATION</b>								
Hired workers.....farms reporting..	46,183	6.9	12,220	3.9	19,609	6.7	16,354	17.4
persons..	391,288	25.2	66,645	13.1	195,866	26.1	128,777	43.4
<b>SPECIFIED FARM EXPENDITURES</b>								
Machine hire.....farms reporting..	37,295	1.4	11,525	0.8	13,668	1.3	12,102	5.2
dollars..	79,143,766	12.9	13,723,235	4.6	34,733,210	16.6	30,687,321	29.9
Hired labor.....farms reporting..	65,589	2.5	17,987	1.4	25,101	2.2	22,501	8.6
dollars..	706,541,037	29.2	158,051,098	18.0	226,487,177	26.7	322,002,762	46.6
Feed for livestock and poultry.....farms reporting..	54,213	1.4	15,452	0.8	20,611	1.2	18,150	5.7
dollars..	385,854,841	12.8	126,595,148	7.0	95,780,616	13.5	163,479,077	31.7
Livestock and poultry purchased.....farms reporting..	45,267	1.5	13,861	0.9	16,412	1.4	14,994	6.4
dollars..	613,802,399	25.7	238,805,718	17.0	144,463,559	26.3	230,533,122	53.4
Seeds, bulbs, plants, and trees purchased.....farms reporting..	47,123	1.4	14,481	0.9	18,780	1.3	13,862	5.6
dollars..	75,026,977	13.8	23,312,245	7.6	26,970,802	16.8	24,743,930	32.5
Gasoline and other petroleum fuel and oil.....farms reporting..	66,548	2.2	18,525	1.1	24,937	2.6	23,086	7.2
dollars..	138,622,335	12.2	35,654,994	5.4	50,585,923	17.1	52,381,418	29.2
Tractor repairs.....farms reporting..	55,853	2.8	17,102	1.3	20,180	3.9	18,571	9.1
dollars..	61,938,594	15.9	12,914,212	6.1	24,101,087	22.1	24,923,295	36.7
Other farm machinery repairs.....farms reporting..	53,100	2.3	16,813	1.2	17,483	2.4	18,804	9.5
dollars..	52,258,222	13.5	14,584,744	6.0	14,318,626	18.6	23,354,852	35.8
<b>FARMS BY TYPE OF FARM</b>								
Field-crop farms, other than vegetable and fruit-and-nut.....number..	25,196	1.7	7,500	2.1	8,286	0.8	9,410	13.0
Vegetable farms.....number..	1,165	2.5	173	1.0	405	2.2	587	6.1
Fruit-and-nut farms.....number..	1,563	1.9	169	1.0	714	3.8	680	1.5
Dairy farms.....number..	2,813	0.5	809	0.2	1,157	1.2	847	1.8
Poultry farms.....number..	1,222	0.7	473	0.5	377	0.7	372	1.4
Livestock farms, other than dairy and poultry.....number..	29,817	3.7	8,084	1.5	11,036	5.3	10,697	15.2
General farms.....number..	4,240	0.9	879	0.3	2,407	1.4	954	2.4
Miscellaneous and unclassified farms.....number..	5,312	0.3	1,131	0.2	3,639	0.3	542	0.4

See footnotes at end of table.

## GENERAL REPORT

Table 4.—FARMS, FARM CHARACTERISTICS, AND VALUE OF FARM PRODUCTS SOLD, FOR SPECIFIED LARGE FARMS, BY REGIONS:  
CENSUS OF 1950—Continued

Item (For definitions and explanations, see text)	The United States		The North		The South		The West	
	Total	Percent of total for all farms	Total	Percent of total for all farms	Total	Percent of total for all farms	Total	Percent of total for all farms
<b>FARMS BY ECONOMIC CLASS</b>								
Commercial farms.....number..	68,399	1.8	18,808	1.1	25,812	1.6	23,779	7.4
Class I (value of products sold, \$25,000 or more).....number..	34,129	33.1	9,425	21.5	10,989	39.0	13,715	43.9
Class II (value of products sold, \$10,000-\$24,999).....number..	19,095	5.0	6,334	2.6	6,256	8.0	6,505	11.1
Class III-VI (value of products sold, \$250-\$9,999).....number..	15,175	0.5	3,049	0.2	8,567	0.6	3,559	1.5
Other farms.....number..	2,929	0.2	410	0.1	2,209	0.2	310	0.2
<b>VALUE OF PRODUCTS SOLD, BY SOURCE</b>								
All farm products sold.....dollars..	3,805,146,050	17.3	1,020,652,165	8.8	1,094,815,687	17.2	1,689,678,198	41.9
Field crops, other than vegetables and fruits and nuts, sold.....dollars..	1,260,540,331	15.7	259,187,142	8.4	414,157,039	11.6	587,196,150	42.9
Vegetables sold.....dollars..	258,870,827	42.6	30,696,718	16.9	58,745,240	36.6	169,428,869	63.8
Fruits and nuts sold.....dollars..	221,205,713	27.9	17,334,656	13.1	91,467,722	44.0	112,403,335	24.9
Horticultural specialties sold.....dollars..	178,062,748	45.4	105,495,667	44.1	36,437,968	47.9	36,129,113	47.1
Dairy products sold.....dollars..	206,731,354	6.7	44,670,060	2.1	62,443,656	12.5	99,617,638	24.3
Poultry and poultry products sold.....dollars..	156,376,942	8.6	61,128,769	5.5	47,909,743	11.2	47,338,430	16.7
Livestock and livestock products, other than poultry and dairy, sold.....dollars..	1,499,080,452	20.8	500,594,215	10.6	363,080,340	27.1	635,405,897	54.4
Forest products sold.....dollars..	24,277,683	18.0	1,544,938	4.3	20,573,979	24.5	2,158,766	14.8
<b>CATTLE AND DAIRY PRODUCTS</b>								
Cattle and calves.....farms reporting..	57,305	1.4	15,622	0.8	23,415	1.2	18,268	6.1
.....number..	13,985,767	18.2	2,801,404	7.1	5,586,341	22.9	5,598,022	43.0
Cows, including heifers that have calved.....farms reporting..	55,411	1.4	14,940	0.8	22,833	1.2	17,638	6.2
.....number..	6,283,798	16.9	976,577	5.3	2,758,422	21.7	2,548,799	41.2
Milk cows.....farms reporting..	43,809	1.2	12,956	0.8	16,756	1.0	14,097	5.5
.....number..	667,385	3.1	170,786	1.3	252,754	4.2	243,845	12.9
Whole milk sold.....farms reporting..	6,849	0.6	2,430	0.3	2,704	1.1	1,715	1.9
.....pounds..	3,670,560,223	5.4	783,464,662	1.6	971,873,135	10.1	1,915,222,426	20.4
.....dollars..	201,359,160	7.4	41,681,077	2.2	61,178,553	13.3	98,499,530	25.4
Cream sold.....farms reporting..	8,614	1.0	4,945	0.8	881	0.4	2,788	4.6
.....pounds of butterfat..	7,325,869	1.3	4,437,128	0.9	1,420,908	2.3	1,467,833	4.0
.....dollars..	4,649,737	1.3	2,807,429	0.9	863,580	2.6	978,728	4.4
Butter, buttermilk, skim milk, and cheese sold.....farms reporting..	664	0.6	96	0.5	512	0.5	56	3.2
.....dollars..	643,009	6.2	181,554	5.6	322,075	4.7	139,380	41.2
<b>HOGS</b>								
Hogs and pigs.....farms reporting..	30,942	1.0	9,777	0.8	14,439	0.9	6,726	5.6
.....number..	2,110,485	3.8	1,039,043	2.6	744,208	5.6	327,234	20.3
Sows and gilts for spring farrowing.....farms reporting..	20,038	1.2	7,170	0.7	9,474	1.4	3,394	6.3
.....number..	283,573	3.0	156,953	2.0	88,857	5.4	37,763	16.8
<b>SHEEP AND WOOL</b>								
Sheep and lambs.....farms reporting..	10,119	3.2	2,207	1.1	3,671	4.7	4,241	10.4
.....number..	13,530,050	43.1	752,998	9.2	4,749,950	45.3	8,027,102	62.9
Sheep and lambs born before Oct. 1, 1949.....farms reporting..	9,924	3.2	2,150	1.1	3,640	4.9	4,134	11.1
.....number..	10,076,497	46.2	588,960	10.8	3,263,693	47.5	6,223,844	65.7
Ewes.....farms reporting..	9,696	3.2	2,092	1.1	3,560	4.8	4,044	11.2
.....number..	9,280,515	46.8	465,817	9.6	2,831,181	47.8	5,983,517	66.3
Sheep and lambs shorn.....farms reporting..	9,042	3.2	2,042	1.1	3,241	4.8	3,759	12.3
.....number shorn..	10,548,483	47.0	660,041	11.6	3,298,649	48.0	6,589,793	66.7
Wool shorn.....pounds..	87,396,859	48.9	4,987,284	11.2	24,345,196	49.5	58,064,379	68.3
<b>POULTRY AND POULTRY PRODUCTS</b>								
Chickens, 4 months old and over, on hand.....farms reporting..	42,828	1.0	11,895	0.7	16,760	0.8	14,173	4.8
.....number..	7,273,669	2.1	3,305,040	1.6	1,583,429	1.7	2,385,200	6.9
Chickens sold.....farms reporting..	12,145	0.7	5,568	0.5	3,735	0.6	2,842	3.2
.....number..	67,351,745	11.5	16,986,348	7.0	42,417,487	14.6	7,947,910	14.2
.....dollars..	64,325,479	11.3	20,266,508	7.5	36,279,959	15.0	7,779,012	13.8
Chicken eggs sold.....farms reporting..	20,579	0.9	8,083	0.6	6,522	0.7	5,974	4.4
.....dozens..	64,980,784	2.7	34,281,260	1.9	8,967,105	2.6	21,732,419	7.4
.....dollars..	32,605,970	3.2	17,175,270	2.4	4,284,871	3.0	11,145,829	7.9
<b>ANIMALS SOLD ALIVE</b>								
Cattle, hogs, sheep, horses, or mules sold alive.....farms reporting..	56,518	1.6	15,627	0.9	23,000	1.5	17,891	7.2
.....dollars..	1,445,880,474	20.5	495,507,136	10.6	345,091,543	26.6	605,281,795	54.4
Cattle and/or calves sold alive.....farms reporting..	51,991	1.7	14,838	0.9	20,848	1.8	16,305	7.5
Cattle sold alive, excluding calves.....farms reporting..	44,981	2.4	13,635	1.2	16,424	3.0	14,922	8.9
.....number..	5,817,413	28.1	1,859,840	15.9	1,439,605	33.5	2,517,968	53.9
.....dollars..	1,021,645,361	30.3	375,865,437	18.2	208,204,455	36.8	437,575,469	58.6
Calves sold alive.....farms reporting..	32,574	1.4	7,296	0.6	15,543	1.6	9,735	6.9
.....number..	2,180,217	14.0	281,382	3.5	1,134,012	20.4	764,823	36.6
.....dollars..	163,960,236	17.8	22,596,254	5.4	83,613,898	23.1	57,750,084	41.3
Hogs and pigs sold alive.....farms reporting..	25,672	1.2	9,458	0.8	11,515	1.4	4,699	5.2
.....number..	2,742,136	4.2	1,606,291	3.1	708,907	6.3	426,938	19.5
.....dollars..	106,204,230	4.5	67,526,862	3.3	21,715,266	7.6	16,962,102	22.9
Sheep and lambs sold alive.....farms reporting..	8,906	3.3	2,207	1.2	3,089	4.8	3,610	12.6
.....number..	8,749,298	43.7	1,451,981	21.5	1,958,363	41.8	5,338,954	62.3
.....dollars..	146,765,670	43.0	27,893,830	22.3	26,972,577	39.2	91,899,263	62.3
Horses and mules sold alive.....farms reporting..	6,569	2.6	1,838	1.4	2,404	2.4	2,327	9.8
.....number..	56,468	9.1	14,028	4.2	15,685	8.0	26,755	30.1
.....dollars..	8,441,717	21.1	1,624,753	9.6	5,722,086	30.5	1,094,878	25.5

See footnotes at end of table.

Table 4.—FARMS, FARM CHARACTERISTICS, AND VALUE OF FARM PRODUCTS SOLD, FOR SPECIFIED LARGE FARMS, BY REGIONS: CENSUS OF 1950—Continued

Item (For definitions and explanations, see text)	The United States		The North		The South		The West	
	Total	Percent of total for all farms	Total	Percent of total for all farms	Total	Percent of total for all farms	Total	Percent of total for all farms
SPECIFIED CROPS HARVESTED								
Corn for all purposes..... farms reporting...	24,729	0.7	9,605	0.6	13,231	0.7	1,893	4.0
..... acres...	2,850,603	3.4	1,511,663	2.5	1,162,408	5.1	176,532	16.5
Harvested for grain..... farms reporting...	20,560	0.6	7,285	0.5	12,570	0.7	805	2.9
..... acres...	2,262,843	3.0	1,157,637	2.2	1,008,055	4.7	97,151	14.8
..... bushels...	79,974,244	2.9	48,082,479	2.1	29,619,350	6.0	2,272,415	13.7
..... bushels sold...	22,500,770	2.6	16,557,197	2.1	4,693,132	7.0	1,250,441	15.5
Wheat threshed or combined <sup>2</sup> ..... farms reporting <sup>3</sup> ...	25,186	2.2	11,156	1.4	4,223	1.7	9,807	8.1
..... acres...	15,181,200	21.3	5,610,020	13.0	2,654,658	19.2	6,916,522	48.7
..... bushels harvested...	217,725,367	21.6	68,309,874	11.7	38,169,100	20.6	111,246,393	46.7
..... bushels sold...	199,819,011	23.6	61,321,630	12.9	35,412,980	22.4	103,084,401	48.7
Oats threshed or combined <sup>2</sup> ..... farms reporting...	17,203	1.2	8,810	0.8	5,263	3.2	3,130	5.3
..... acres...	1,366,413	3.9	728,085	2.3	430,612	14.1	207,716	17.2
..... bushels harvested...	38,857,197	3.4	21,631,163	2.1	11,196,847	15.2	6,029,187	14.3
..... bushels sold...	12,489,043	5.2	6,262,166	3.2	3,623,724	16.1	2,603,153	14.7
Peanuts harvested for picking or threshing <sup>2</sup> ..... farms reporting...	1,791	1.0	(*)	(*)	1,791	1.0	.....	.....
..... acres grown alone...	108,518	5.1	(*)	(*)	108,518	5.1	.....	.....
..... acres grown with other crops...	190	5.0	(*)	(*)	190	5.0	.....	.....
..... pounds harvested...	85,735,822	5.0	(*)	(*)	85,735,822	5.0	.....	.....
Land from which hay was cut..... farms reporting...	36,951	1.4	13,506	0.9	11,103	1.2	12,342	5.5
..... acres...	7,787,935	11.9	3,633,449	8.3	1,123,875	9.5	3,030,611	30.4
Irish potatoes harvested for home use or for sale..... farms reporting...	9,744	0.6	3,644	0.6	4,034	0.4	2,066	3.8
..... acres...	240,318	15.9	108,736	12.7	33,542	13.0	98,040	24.3
..... bushels harvested...	76,156,852	20.8	30,971,121	14.9	5,775,978	16.2	39,409,753	32.2
..... sold, dollars...	88,362,644	24.9	32,152,320	16.9	9,010,058	26.6	47,200,266	36.2
Cotton harvested <sup>2</sup> ..... farms reporting...	9,889	0.9	110	0.7	8,433	0.8	1,346	10.0
..... acres...	2,930,546	11.0	36,611	6.2	2,105,951	8.6	787,984	51.8
..... bales harvested...	2,581,360	16.7	29,629	6.2	1,361,795	10.5	1,189,936	58.8
..... lint cotton and cottonseed sold, dollars...	372,433,387	17.0	3,986,164	6.0	198,648,365	10.8	169,798,858	58.4
Tobacco harvested <sup>2</sup> ..... farms reporting <sup>4</sup> ...	1,507	0.3	123	0.4	1,384	0.3	.....	.....
..... acres...	27,862	1.8	11,605	10.1	16,257	1.1	.....	.....
..... pounds harvested...	33,615,448	1.9	14,049,634	8.7	19,565,814	1.2	.....	.....
..... sold, dollars...	42,614,916	5.2	28,488,033	36.0	14,126,883	1.9	.....	.....
Sugarcane harvested for sugar or sale to mills..... farms reporting...	241	4.8	.....	.....	241	4.8	.....	.....
..... acres...	173,375	54.3	.....	.....	173,375	54.3	.....	.....
..... pounds harvested...	3,618,227	57.4	.....	.....	3,618,227	57.4	.....	.....
..... sold, dollars...	23,214,743	58.2	.....	.....	23,214,743	58.2	.....	.....
Sugar beets harvested for sugar <sup>2</sup> ..... farms reporting...	909	3.3	9.5	0.9	.....	.....	814	4.9
..... acres...	104,028	15.7	11,003	5.1	.....	.....	93,025	21.0
..... tons harvested...	1,886,989	19.0	122,112	5.1	.....	.....	1,764,877	23.4
..... sold, dollars...	22,592,899	20.3	1,373,989	5.2	.....	.....	21,218,910	25.0
Land in bearing and nonbearing orchards, groves, vineyards, and planted nut trees..... farms reporting...	19,241	0.9	3,862	0.4	10,509	1.0	4,870	2.2
..... acres...	880,939	18.7	53,788	5.1	523,482	28.5	303,669	16.6

\*Not available.

<sup>1</sup>0.05 percent or less.

<sup>2</sup>Totals for States for which data were tabulated for large farms. The totals for States for which data were not tabulated for large farms represented the following proportions of the totals for all farms for the United States:

Wheat..... acres..	0.4 percent
..... bushels harvested..	0.3 percent
..... bushels sold..	0.2 percent
Oats threshed..... acres..	0.1 percent
..... bushels harvested..	0.1 percent
..... bushels sold..	0.1 percent
Peanuts..... acres..	Less than 0.05 percent
..... pounds harvested..	Less than 0.05 percent
Cotton..... acres..	Less than 0.05 percent
..... bales harvested..	Less than 0.05 percent
Tobacco..... acres..	0.4 percent
..... pounds harvested..	0.4 percent
Sugar beets for sugar..... acres..	14.4 percent
..... tons harvested..	11.9 percent

<sup>3</sup>Farms reporting are for the most commonly grown kind of wheat in each of the States where there were inquiries for 2 or more kinds of wheat.

<sup>4</sup>Includes only farms reporting burley tobacco for Kentucky and Tennessee.

Table 5.—SAMPLING RELIABILITY OF ESTIMATED NUMBER OF FARMS AND FARMS REPORTING: CENSUS OF 1950

If the estimated number of farms or farms reporting is —	Then the chances are about 2 in 3 that the estimated number would differ from the results of a complete tabulation by less than <sup>1</sup> —
	Percent
25.....	40
50.....	28
100.....	20
250.....	13
500.....	8.9
1,000.....	6.3
2,500.....	4.0
5,000.....	2.8
10,000.....	2.0
25,000.....	1.3
50,000 or more.....	Less than 1 percent

<sup>1</sup> In the case of items for which the estimated number of farms or farms reporting constitutes more than 50 percent of all farms in the universe, more precise limits may be obtained by multiplying the percent difference given in the table by an approximate factor as follows:

When the number of farms or farms reporting constitute (percent)—	Multiply given limit by—
50	0.75
75	.50
90	.30
95	.20

when the difference was not great enough to affect the usefulness of the data.

**Sample for the 1945 Census.**—The sample of farms used in 1945 was only about one-third as large as that used in 1950 and was selected by a different method. In 1945, each county was divided into cross-sections of small areas averaging 2.5 square miles in size and containing about 5 farms each. A sample of 1 out of every 18 of these small areas or sample segments was selected and all farms having their headquarters within the selected areas were designated as sample farms, and were enumerated on questionnaires containing the supplementary questions in addition to the questions asked of nonsample farms. In 1945, as in 1950, the sampling plan provided for the inclusion of approximately 50,000 large farms regardless of their location.

**Publication of data.**—In general, data from the 1950 Census of Agriculture have been published in both preliminary and final form. Preliminary data for each county and State were released in the form of a four-page preliminary report as soon as possible after tabulation of data for each county and State. A facsimile of one of these reports is shown in the Appendix.

Final figures for the 1950 Census of Agriculture are published in Volumes I, II, and V of the 1950 Census of Agriculture reports. Volume I contains, essentially, all the data tabulated for the 1950 Census of Agriculture for each county, State economic area, and State. This volume is published in 34 parts. Parts 1 through 33 contain reports for each State or group of nearby States, by counties and by State economic areas while part 34 contains data for Alaska, Hawaii, Puerto Rico, Guam, American Samoa, and the Virgin Islands of the United States. The data given in part 34 are less detailed than those for the States, as the questionnaires used for these areas were briefer than those for the continental United States and were adapted to the agriculture of each territory or possession.

Volume II contains a summary of the data for the 1950 Census of Agriculture. It presents data for States, geographic divisions, regions, and for the United States, accompanied by analytical discussions regarding the data, and maps, graphs, etc., showing some of the significant facts indicated by the data.

Volume V comprises several supplementary reports of the 1950 Census of Agriculture. Part 1 of Volume V, "Horticultural Speci-

Table 6.—SAMPLING RELIABILITY OF ESTIMATED ITEM TOTALS FOR STATES, GEOGRAPHIC DIVISIONS, REGIONS, AND THE UNITED STATES FOR SPECIFIED NUMBER OF FARMS REPORTING, BY LEVELS: CENSUS OF 1950

If the estimated total number of farms reporting is—	Then the chances are about 2 in 3 that the estimated item total would differ from the results of a complete tabulation of the item for all farms by less than <sup>1</sup>						
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
	Percent	Percent	Percent	Percent	Percent	Percent	Percent
25.....	44	49	57	63	75	85	98
50.....	31	35	40	45	53	60	70
100.....	22	25	29	32	38	43	49
250.....	14	16	18	20	24	27	31
500.....	10	11	13	14	17	19	22
1,000.....	7.0	8.0	9.0	10	12	14	16
2,500.....	4.4	4.9	5.7	6.3	7.5	8.5	9.8
5,000.....	3.1	3.5	4.0	4.5	5.3	6.0	7.0
10,000.....	2.2	2.5	2.9	3.2	3.8	4.3	4.9
25,000.....	1.4	1.6	1.8	2.0	2.4	2.7	3.1
50,000.....	1.0	1.1	1.3	1.4	1.7	1.9	2.2
100,000.....	.70	.80	.90	1.0	1.2	1.4	1.6
250,000.....	.44	.49	.57	.63	.75	.85	.98

<sup>1</sup> In the case of items where large farm reports constitute a significant proportion of the item total more precise limits may be obtained by reducing the percent difference given in the table by the proportion of the item total reported on large farms. See table 4 for large farm totals.

alties," contains data for a special census of nurseries, greenhouses, and other horticultural-specialty establishments. This special census was limited to farms or establishments reporting the sale of \$1,000 or more of any of the three following groups of horticultural-specialty products:

- (1) Nursery products (trees, shrubs, vines, ornamentals, etc.).
- (2) Flowers and flowering plants.
- (3) Vegetables grown under glass, flower seeds, vegetable seeds, vegetable plants, bulbs, and mushrooms.

This special report presents statistics by States and counties regarding the number of establishments, sales, value of individual crops produced, employment, and value of land and buildings for:

- (1) Cut flowers and flowering or foliage plants (including vegetables grown under glass and propagated mushrooms).
- (2) Nurseries.
- (3) Bulb farms.
- (4) Flower-seed farms.

Part 2 of Volume V, "Multiple-unit Operations," contains data on the number and characteristics of multiple-unit operations, farms in multiple units, and farms not in multiple units for selected counties and State economic areas for 13 Southern States and 7 counties in southeastern Missouri. A multiple-unit operation is a landlord holding of two or more subunits (Census-defined farms), one of which may consist of land not assigned to croppers or other tenants (home farm), but the other subunit or subunits must represent land assigned to croppers.

Part 3 of Volume V, "Ranking Agricultural Counties," presents data regarding the rank of the leading counties in the United States for 58 items for the 1950 Census of Agriculture.

Part 4 of Volume V, "Land Utilization—A Graphic Summary," contains a summary prepared in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture for the uses of land in the United States.

Part 5 of Volume V, "Farm Tenure—A Graphic Summary," provides a summary of farm tenure and changes in farm tenure as shown by the various censuses of agriculture. This special report has been prepared in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture.



Table 7.—INDICATED LEVEL OF SAMPLING RELIABILITY OF ESTIMATED TOTALS OF SPECIFIED ITEMS FOR THE REGIONS AND THE UNITED STATES: 1950—Continued

[For reliability of estimates by geographic divisions, use the level indicated for the region in which the geographic division is located. For reliability of estimates for States, see State Table 30 in Volume I of the reports of the 1950 Census of Agriculture or use the level indicated for the region in which the State is located]

Item (For definitions and explanations, see text)	Level of sampling reliability (refer to corresponding numbered columns in table 6)																							
	The North																							
	Size groups					Tenure groups			Economic-class groups						Type-of-farm groups									
Total	Under 10 acres	10-99 acres	100-219 acres	220-499 acres	500 acres and over	Full owners and managers	Part owners	All tenants	Classes I and II	Class III	Classes IV and V	Classes VI and VII	Classes VIII and IX	Vegetable	Fruit-and-nut	Cotton and other field-crop	Cash-grain and general—primarily crop	Dairy	Poultry	Livestock and general—primarily livestock	General—crop and livestock	Miscellaneous and unclassified		
<b>FARMS, AND FARM CHARACTERISTICS</b>																								
Land owned or managed by farm operators.....acres..	1	5	2	1	1	1	2	2	x	2	2	2	2	2	4	3	3	2	2	2	3	2	2	4
Land rented from others and/or to others by																								
Farm operators.....acres..	1	2	2	1	1	2	3	3	2	2	2	2	3	3	2	3	2	2	2	2	2	2	2	3
Land in farms; average size of farm.....acres..	1	1	1	1	1	1	3	3	2	1	1	2	2	2	3	3	2	2	2	2	2	2	2	3
Value of land and buildings per farm, per acre.....dollars..	2	3	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
Cropland; total, harvested, pastured, other.....acres..	1	2	2	1	1	1	3	3	2	1	1	2	2	2	3	2	3	2	2	2	2	2	2	3
Woodland; total, pastured, not pastured.....acres..	2	2	2	2	3	3	4	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3
Total pasture, other pasture, other land.....acres..	2	2	2	2	2	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Irrigated land in farms.....acres..	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Land irrigated by sprinklers.....acres..	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Age of farm operator, year began operation of present farm, average.....years..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Average distance to trading center; average distance over dirt or unimproved roads.....miles..	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>SPECIFIED FACILITIES AND EQUIPMENT</b>																								
Average of last monthly electric bill.....dollars..	2	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1
Grain combines, corn pickers, pick-up hay balers.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Upright or pit or trench silos.....number..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Motortrucks.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tractors; total, wheel, garden, crawler.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Automobiles.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>FARM LABOR</b>																								
Family and/or hired workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hired workers or regular workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seasonal workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Paid on monthly, weekly, daily, hourly, piecework, or no report as to basis of payment.....persons..	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Average hours worked per month, week, day.....hours..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Average wage per month, week, day, hour.....dollars..	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>SPECIFIED FARM EXPENDITURES</b>																								
Machine hire and/or hired labor.....dollars..	4	5	5	4	4	3	6	4	4	3	4	4	4	4	4	4	5	4	4	5	5	4	4	4
Feed for livestock or poultry.....dollars..	4	4	4	4	3	3	4	4	4	3	3	3	3	3	4	4	4	4	4	4	5	3	4	4
Livestock and poultry purchased.....dollars..	6	5	6	5	5	5	6	5	6	4	5	5	5	5	5	5	5	6	4	6	4	4	5	4
Seeds, bulbs, plants, and trees purchased.....dollars..	3	4	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4
Gasoline and other petroleum fuel and oil.....dollars..	3	4	3	3	2	2	3	2	3	2	2	3	3	3	3	4	3	3	3	3	3	3	3	4
Farm machinery repairs.....dollars..	3	3	3	3	3	3	4	3	3	2	3	3	3	3	4	3	3	3	3	3	4	3	4	4
<b>VALUE OF PRODUCTS SOLD, BY SOURCE</b>																								
All farm products sold, average sales per farm reporting.....dollars..	2	6	4	2	2	2	4	3	3	1	1	1	1	1	3	3	3	3	4	3	3	3	4	4
All crops sold.....dollars..	3	3	4	4	3	3	4	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
Vegetables sold.....dollars..	4	5	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Fruits and nuts sold.....dollars..	5	4	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4
All livestock and livestock products sold.....dollars..	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Dairy products sold.....dollars..	3	3	3	3	3	3	3	3	3	3	2	2	2	2	3	3	3	3	3	3	3	3	3	3
Poultry and poultry products sold.....dollars..	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Forest products sold.....dollars..	3	3	4	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
<b>LIVESTOCK AND LIVESTOCK PRODUCTS</b>																								
Horses and/or mules.....number..	1	1	1	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1
Cattle and calves.....number..	2	2	2	2	2	2	3	3	2	2	2	2	2	2	3	3	3	3	2	3	3	3	2	2
Cows, including heifers that have calved.....number..	2	2	2	2	2	3	2	2	3	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2
Milk cows.....number..	2	2	2	2	2	3	2	2	3	2	2	2	2	2	2	2	2	2	2	3	3	3	2	2
Hogs and pigs.....number..	3	3	4	3	3	3	4	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Chickens, 4 months old and over, on hand.....number..	3	4	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Chickens sold.....number..	5	5	5	4	4	5	5	4	3	4	4	4	4	4	4	4	4	4	4	5	3	3	3	3
Chicken eggs sold.....dozens..	4	4	4	4	3	3	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cattle and calves sold.....number..	4	4	4	4	4	4	5	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Hogs and pigs sold.....number..	3	3	3	3	3	3	4	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	2
<b>SPECIFIED CROPS HARVESTED</b>																								
Corn for all purposes...harvested for grain, bu. harvested..	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Corn sold.....bushels..	3	3	3	3	3	3	3	3	3	2	2	3	2	2	2	2	2	2	2	3	3	3	3	3
Wheat threshed or combined.....acres, bushels harvested, bushels sold..	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2
Oats threshed or combined.....acres, bushels harvested, bushels sold..	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2
Cotton harvested.....acres, bales, value of sales..	3	2	3	3	3	3	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tobacco harvested.....acres, pounds, value of sales..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees.....acres..	3	3	3	3	4	4	3	3	3	3	3	3	3	2	2	2	2	2	3	3	3	3	3	3
Irish potatoes harvested.....acres, bushels, value of sales..	4	4	4	4	4	4	5	3	3	3	3	3	3	2	4	4	4	4	4	4	4	4	4	4
Land from which hay was cut.....acres..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>Level of sampling reliability for specified items by number of chickens on hand</b>																								
Item	Total	Under 25 chickens	25-49 chickens	50-99 chickens	100-199 chickens	200-399 chickens	400-799 chickens	800-1,599 chickens	1,600-3,199 chickens	3,200 chickens or more														
Chickens on hand.....number..	3	1	1	1	1	1	1	1	1	1														
Chickens sold.....number..	5	5	4	4	3	3	3	2	2	2														
Eggs sold.....dozens..	4	4	4	3	3	3	2	2	2	2														
<b>Level of sampling reliability for specified items by number of milk cows</b>																								
Item	Total	1 or 2 cows	3 or 4 cows	5-9 cows	10-19 cows	20-29 cows	30-49 cows	50 cows and over																
Cows milked yesterday.....number..	2	1	1	1	1	1	1	1																
All dairy products sold.....dollars..	3	3	3	3	2	2	2	2																
Whole milk sold.....pounds..	3	3	3	2	2	2	2	2																
dollars..	3	3	3	2	2	2	2	2																
Cream sold.....pounds of butterfat..	3	2	2	2	2	2	2	2																
dollars..	3	2	2	2	2	2	2	2																

Table 7.—INDICATED LEVEL OF SAMPLING RELIABILITY OF ESTIMATED TOTALS OF SPECIFIED ITEMS FOR THE REGIONS AND THE UNITED STATES: 1950—Continued

[For reliability of estimates by geographic divisions use the level indicated for the region in which the geographic division is located. For reliability of estimates for States, see State Table 30 in Volume I of the reports of the 1950 Census of Agriculture or use the level indicated for the region in which the State is located.]

Item (For definitions and explanations, see text)	Level of sampling reliability (refer to corresponding numbered columns in table 6)																						
	Total	The South										Type-of-farm groups											
		Size groups					Tenure groups			Economic-class groups		Vegetable				Fruit-and-nut		Cotton and other field-crop		Cash-grain and general—primarily crop	Dairy	Poultry	Livestock and general—primarily livestock
Under 10 acres	10-99 acres	100-249 acres	250-499 acres	500 acres and over	Full owners and managers	Part owners	All tenants except croppers	Croppers	Classes I and II	Class III	Classes IV and V	Classes VI and VII	Classes VIII and IX	Vegetable	Fruit-and-nut	Cotton and other field-crop	Cash-grain and general—primarily crop	Dairy	Poultry	Livestock and general—primarily livestock	General—crop and livestock	Miscellaneous and unclassified	
<b>FARMS, AND FARM CHARACTERISTICS</b>																							
Land owned or managed by farm operators.....acres..	2	4	2	1	1	3	3	x	x	2	2	2	3	4	3	3		2	3	3	3	2	5
Land rented from others and/or to others by farm operators.....acres..	2	1	2	1	2	4	4	4	4	3	3	4	3	3	3	4	3	3	3	3	3	3	3
Land in farms; average size of farm.....acres..	1	1	1	1	1	4	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	2	4
Value of land and buildings per farm, per acre.....dollars..	2	3	3	3	2	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Cropland; total, harvested, pastured, other.....acres..	2	2	2	2	2	3	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Woodland; total, pastured, not pastured.....acres..	2	2	2	2	2	3	5	4	3	3	3	3	3	4	4	4	4	3	4	3	4	4	4
Total pasture, other pasture, other land.....acres..	2	2	2	2	2	3	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	4
Irrigated land in farms.....acres..	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Land irrigated by sprinklers.....acres..	2	2	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Age of farm operator, year began operation of present farm, average.....years..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Average distance to trading center; average distance over dirt or unimproved roads.....miles..	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>SPECIFIED FACILITIES AND EQUIPMENT</b>																							
Average of last monthly electric bill.....dollars..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Grain combines, corn pickers, pick-up hay balers.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Upright or pit or trench silos.....number..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Motortrucks.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tractors; total, wheel, garden, crawler.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Automobiles.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>FARM LABOR</b>																							
Family and/or hired workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hired workers or regular workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seasonal workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Paid on monthly, weekly, daily, hourly, piecework, or no report as to basis of payment.....persons..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Average hours worked per month, week, day.....hours..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Average wage per month, week, day, hour.....dollars..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>SPECIFIED FARM EXPENDITURES</b>																							
Machine hire and/or hired labor.....dollars..	4	4	5	5	5	6	4	5	4	4	4	4	5	5	4	5	5	4	5	5	4	5	5
Feed for livestock or poultry.....dollars..	5	4	5	5	5	6	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	5	4
Livestock and poultry purchased.....dollars..	6	4	5	6	6	5	7	6	4	4	4	4	5	5	4	4	5	5	4	5	5	5	4
Seeds, bulbs, plants, and trees purchased.....dollars..	4	3	4	3	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	4	4	4	4
Gasoline and other petroleum fuel and oil.....dollars..	3	3	4	3	3	4	3	4	3	4	3	2	3	4	2	3	3	4	3	4	3	3	3
Farm machinery repairs.....dollars..	3	2	3	3	3	3	3	3	3	2	2	3	3	3	3	3	3	3	3	3	3	3	3
<b>VALUE OF PRODUCTS SOLD, BY SOURCE</b>																							
All farm products sold, average sales per farm reporting.....dollars..	4	4	4	3	3	3	5	4	4	3	2	2	2	2	4	3	3	3	3	3	3	3	4
All crops sold.....dollars..	3	2	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
Vegetables sold.....dollars..	3	3	3	3	3	4	4	4	3	3	3	4	3	3	3	3	4	3	3	3	3	3	3
Fruits and nuts sold.....dollars..	4	4	4	4	4	5	4	4	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3
All livestock and livestock products sold.....dollars..	4	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	2
Dairy products sold.....dollars..	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3	2
Poultry and poultry products sold.....dollars..	6	5	6	6	6	6	6	6	6	6	6	6	6	4	4	4	4	4	4	4	4	4	3
Forest products sold.....dollars..	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	4	4	4	4	4	3
<b>LIVESTOCK AND LIVESTOCK PRODUCTS</b>																							
Horses and/or mules.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cattle and calves.....number..	3	3	3	3	3	3	4	4	4	3	3	3	3	3	2	4	4	4	3	3	3	3	3
Cows, including heifers that have calved.....number..	3	3	3	3	3	3	4	4	4	3	3	3	3	3	2	3	3	3	3	3	3	3	2
Milk cows.....number..	3	3	3	3	3	3	4	4	4	3	3	3	3	3	2	3	3	3	3	3	3	3	2
Hogs and pigs.....number..	3	3	3	3	3	3	4	4	4	3	3	3	3	3	2	3	3	3	3	3	3	3	3
Chickens, 4 months old and over, on hand.....number..	3	4	5	5	5	5	6	5	5	5	4	4	5	4	2	4	4	4	4	5	5	4	3
Chickens sold.....number..	5	5	5	5	5	5	6	5	5	5	4	4	4	4	3	4	4	4	4	4	4	4	3
Chicken eggs sold.....dozens..	5	5	5	5	5	5	6	5	5	5	4	4	4	4	3	4	4	4	4	4	4	4	3
Cattle and calves sold.....number..	4	3	3	3	4	5	4	4	4	4	4	4	3	3	2	3	3	3	3	3	3	3	3
Hogs and pigs sold.....number..	3	4	4	4	3	3	4	4	4	3	4	3	4	3	2	3	3	3	3	3	3	3	3
<b>SPECIFIED CROPS HARVESTED</b>																							
Corn for all purposes.....harvested for grain, bushels harvested..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Corn sold.....bushels..	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
Wheat threshed or combined.....acres, bushels harvested, bushels sold..	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Oats threshed or combined.....acres, bushels harvested, bushels sold..	2	2	2	2	3	3	3	3	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2
Cotton harvested.....acres, bales, value of sales..	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Tobacco harvested.....acres, pounds, value of sales..	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees.....acres..	4	3	4	4	4	4	5	4	4	4	4	3	3	3	3	4	3	3	3	3	3	3	3
Irish potatoes harvested.....acres, bushels, value of sales..	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2
Land from which hay was cut.....acres..	2	2	2	2	2	2	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2

Item	Level of sampling reliability for specified items by number of chickens on hand									
	Total	Under 25 chickens	25-49 chickens	50-99 chickens	100-199 chickens	200-399 chickens	400-799 chickens	800-1,599 chickens	1,600-3,199 chickens	3,200 chickens or more
Chickens on hand.....number..	3	1	1	1	1	1	1	1	1	1
Chickens sold.....number..	5	4	4	4	4	4	3	3	3	2
Eggs sold.....dozens..	5	5	4	3	3	3	3	2	2	2

Item	Level of sampling reliability for specified items by number of milk cows							
	Total	1 or 2 cows	3 or 4 cows	5-9 cows	10-19 cows	20-29 cows	30-49 cows	50 cows and over
Cows milked yesterday.....number..	3	1	1	1	1	1	1	1
All dairy products sold.....dollars..	5	4	3	3	3	3	2	2
Whole milk sold.....pounds..	5	4	3	3	3	3	2	2
.....dollars..	5	4	3	3	3	3	2	2
Cream sold.....pounds of butterfat..	4	4	4	4	4	4	3	2
.....dollars..	4	4	4	4	4	3	3	2

Table 7.—INDICATED LEVEL OF SAMPLING RELIABILITY OF ESTIMATED TOTALS OF SPECIFIED ITEMS FOR THE REGIONS AND THE UNITED STATES: 1950—Continued

[For reliability of estimates by geographic divisions use the level indicated for the region in which the geographic division is located. For reliability of estimates for States, see State Table 30 in Volume I of the reports of the 1950 Census of Agriculture or use the level indicated for the region in which the State is located]

Item (For definitions and explanations, see text)	Level of sampling reliability (refer to corresponding numbered columns in table 6)																						
	The West																						
	Size groups					Tenure groups			Economic-class groups					Type-of-farm groups									
	Total	Under 10 acres	10-99 acres	100-219 acres	220-499 acres	500 acres and over	Full owners and managers	Part owners	All tenants	Classes I and II	Class III	Classes IV and V	Classes VI and VII	Classes VIII and IX	Vegetable	Fruit-and-nut field-crop	Cotton and other field-crop	Cash-grain and general—primarily crop	Dairy	Poultry	Livestock and general—primarily livestock	General-crop and livestock	Miscellaneous and unclassified
<b>FARMS, AND FARM CHARACTERISTICS</b>																							
Land owned or managed by farm operators.....acres..	2	4	3	2	2	2	6	4	x	5	4	5	5	6	5	5	4	4	4	5	5	4	6
Land rented from others and/or to others by farm operators.....acres..	2	2	2	2	2	3	4	4	4	3	4	5	4	5	4	4	3	4	3	4	4	3	5
Land in farms; average size of farm.....acres..	1	1	1	1	1	1	6	4	4	4	4	5	5	5	5	5	4	4	5	5	5	4	6
Value of land and buildings per farm, per acre.....dollars..	2	2	2	2	2	2	4	2	3	2	2	2	3	3	3	3	3	3	3	3	3	2	3
Cropland; total, harvested, pastured, other.....acres..	2	1	2	2	2	3	5	3	3	2	2	3	3	4	4	4	3	3	3	3	4	4	4
Woodland; total, pastured, not pastured.....acres..	2	2	2	2	2	3	5	4	4	5	4	5	5	5	5	5	5	5	4	4	5	4	4
Total pasture, other pasture, other land.....acres..	3	1	3	3	3	3	5	5	5	5	6	6	6	5	5	4	4	4	4	4	5	5	5
Irrigated land in farms.....acres..	2	1	2	2	2	3	4	3	4	2	3	3	3	3	3	3	3	3	3	3	3	3	4
Land irrigated by sprinklers.....acres..	3	2	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Age of farm operator, year began operation of present farm, average.....years..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Average distance to trading center; average distance over dirt or unimproved roads.....miles..	3	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>SPECIFIED FACILITIES AND EQUIPMENT</b>																							
Average of last monthly electric bill.....dollars..	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Grain combines, corn pickers, pick-up hay balers.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Upright or pit or trench silos.....number..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Motortrucks.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tractors; total, wheel, garden, crawler.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Automobiles.....number..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>FARM LABOR</b>																							
Family and/or hired workers.....persons..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hired workers or regular workers.....persons..	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	2	1	1	2	1	2	1	1
Seasonal workers.....persons..	2	2	2	1	1	1	2	2	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1
Paid on monthly, weekly, daily, hourly, piecework, or no report as to basis of payment.....persons..	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Average hours worked per month, week, day.....hours..	2	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Average wage per month, week, day.....dollars..	1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
<b>SPECIFIED FARM EXPENDITURES</b>																							
Machine hire and/or hired labor.....dollars..	4	4	4	4	4	3	6	4	4	3	3	4	4	4	3	4	4	4	4	5	5	4	4
Feed for livestock or poultry.....dollars..	6	4	6	6	5	5	6	4	5	4	3	4	3	3	4	5	4	4	4	4	4	3	3
Livestock and poultry purchased.....dollars..	6	5	5	6	6	6	7	6	6	5	5	5	5	4	4	5	5	5	5	4	6	4	4
Seeds, bulbs, plants, and trees purchased.....dollars..	4	4	4	4	4	4	5	4	4	4	4	4	4	4	3	3	4	4	4	4	4	4	4
Gasoline and other petroleum fuel and oil.....dollars..	3	3	3	3	3	3	4	3	3	3	2	3	4	3	3	3	2	3	3	2	3	3	4
Farm machinery repairs.....dollars..	3	4	4	3	3	3	5	3	4	3	3	4	4	3	3	3	3	4	4	4	4	3	3
<b>VALUE OF PRODUCTS SOLD, BY SOURCE</b>																							
All farm products sold, average sales per farm reporting.....dollars..	4	5	5	4	3	3	5	3	4	1	1	1	1	1	3	4	3	3	3	4	4	4	5
All crops sold.....dollars..	5	5	5	5	5	5	6	5	4	3	3	3	3	3	3	4	3	4	4	3	4	4	4
Vegetables sold.....dollars..	3	3	3	4	4	4	4	3	4	3	3	3	3	3	3	4	4	4	4	4	4	4	4
Fruits and nuts sold.....dollars..	4	4	4	4	4	4	5	4	4	4	3	3	3	3	4	4	3	4	4	4	4	3	3
All livestock and livestock products sold.....dollars..	4	4	4	4	4	4	6	5	4	4	3	3	3	3	4	4	4	4	4	3	4	4	4
Dairy products sold.....dollars..	4	3	4	4	4	3	5	4	4	3	3	3	2	2	4	4	4	4	4	4	4	4	4
Poultry and poultry products sold.....dollars..	5	5	6	5	5	5	6	6	5	4	4	4	4	4	5	5	4	4	4	4	4	5	4
Forest products sold.....dollars..	4	5	4	4	4	4	5	4	4	3	3	3	3	3	3	4	3	4	4	4	4	5	5
<b>LIVESTOCK AND LIVESTOCK PRODUCTS</b>																							
Horses and/or mules.....number..	2	2	2	2	2	3	3	2	2	2	2	2	2	2	2	1	2	2	2	2	2	2	2
Cattle and calves.....number..	3	3	3	3	4	4	5	4	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3
Cows, including heifers that have calved.....number..	4	2	4	4	4	3	5	4	4	3	3	3	3	3	2	3	4	3	3	4	3	4	3
Milk cows.....number..	4	2	4	4	4	3	5	4	4	3	3	3	3	3	2	3	4	3	3	4	3	4	3
Hogs and pigs.....number..	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	5	4	4	4	4	5	4	4
Chickens, 4 months old and over, on hand.....number..	5	5	4	5	4	4	5	4	4	4	3	3	3	4	4	4	4	3	3	4	4	4	3
Chickens sold.....number..	6	6	6	6	6	6	6	5	5	6	5	5	4	3	4	4	3	4	3	6	5	4	3
Chicken eggs sold.....dozens..	5	4	5	5	5	4	5	5	4	5	4	4	4	4	3	4	5	4	4	4	4	4	4
Cattle and calves sold.....number..	4	4	4	4	4	4	6	5	4	4	3	3	3	3	3	3	3	3	3	3	4	5	3
Hogs and pigs sold.....number..	4	4	4	3	3	3	4	4	4	3	4	4	4	3	4	4	4	4	3	3	4	3	3
<b>SPECIFIED CROPS HARVESTED</b>																							
Corn for all purposes.....harvested for grain, bushels harvested..	2	2	2	2	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	2
Corn sold.....bushels..	3	3	3	3	3	3	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Wheat threshed or combined.....acres, bushels harvested, bushels sold..	2	2	2	2	3	3	3	3	3	2	2	2	2	3	3	3	3	2	3	3	3	2	3
Oats threshed or combined.....acres, bushels harvested, bushels sold..	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	3	2	2	3	3	2
Cotton harvested.....acres, bales, value of sales..	2	2	2	2	2	2	4	3	4	3	4	2	2	2	2	2	4	3	2	3	3	3	3
Tobacco harvested.....acres, pounds, value of sales..	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees.....acres..	3	3	3	3	3	3	4	3	3	3	3	3	3	2	3	4	3	2	2	2	2	2	2
Irish potatoes harvested.....acres, bushels, value of sales..	4	4	4	4	4	4	5	3	3	3	3	3	3	2	3	3	4	3	3	3	3	3	3
Land from which hay was cut.....acres..	2	1	2	2	2	2	4	3	3	4	3	3	3	3	3	3	3	3	3	3	3	2	3

Item	Level of sampling reliability for specified items by number of chickens on hand									
	Total	Under 25 chickens	25-49 chickens	50-99 chickens	100-199 chickens	200-399 chickens	400-799 chickens	800-1,599 chickens	1,600-3,199 chickens	3,200 chickens or more
Chickens on hand.....number..	5	1	1	1	1	1	1	1	1	1
Chickens sold.....number..	6	4	4	4	4	3	3	3	3	3
Eggs sold.....dozens..	5	4	4	3	3	2	2	2	2	2

Item	Level of sampling reliability for specified items by number of milk cows							
	Total	1 or 2 cows	3 or 4 cows	5-9 cows	10-19 cows	20-29 cows	30-49 cows	50 cows and over
Cows milked yesterday.....number..	4	1	1	1	1	1	1	1
All dairy products sold.....dollars..	4	3	3	3	3	3	2	2
Whole milk sold.....pounds..	4	4	4	3	3	3	2	2
.....dollars..	4	4	4	3	3	3	2	2
Cream sold.....pounds of butterfat..	4	4	4	4	3	3	3	3
.....dollars..	4	4	4	4	3	3	3	3

Part 6 of Volume V, "Agriculture, 1950—A Graphic Summary," presents geographically the significant facts about agriculture shown by the 1950 Census and a summary of important agricultural changes since 1900.

Part 7 of Volume V, "Irrigation, 1950—A Graphic Summary," provides a graphic summary of the important facts regarding irrigation shown by the 1950 Census of Agriculture and Irrigation.

Part 8 of Volume V, "Farm-Mortgage Debt," contains data on farm mortgage indebtedness and interest rates for States and for the United States. This report has been prepared in cooperation with the Bureau of Agricultural Economics of the United States Department of Agriculture.

Part 9 of Volume V, "Economic Class and Type of Farm—A Graphic Summary," presents the significant facts shown by the 1950 Census of Agriculture regarding farms classified by type and economic class of farm.

Part 10 of Volume V, "Farms and Farm Characteristics by Economic Subregions," presents a summary for selected items for the 1950 Census of Agriculture for 119 subregions.

### DEFINITIONS

Definitions are presented only for those items for which the table descriptions are considered inadequate. The descriptive terms refer principally to the 1950 Census of Agriculture, although, in general, they are also applicable to earlier censuses. The definitions consist primarily of a résumé of the questionnaire wording, occasionally supplemented by the more essential parts of instructions given to the enumerators. For the exact phrasing of the inquiries and of the instructions included on the questionnaire, reference should be made to the facsimile of the 1950 Agriculture Questionnaire shown in the Appendix.

**A farm.**—For the 1950 Census of Agriculture, places of 3 or more acres were counted as farms if the value of agricultural products in 1949, exclusive of home gardens, amounted to \$150 or more. The agricultural products could have been either for home use or for sale. Places of less than 3 acres were counted as farms only if the value of sales of agricultural products in 1949 amounted to \$150 or more. Places operated in 1949 for which the value of agricultural products in 1949 was less than these minima because of crop failure or other unusual situation, and places operated in 1950 for the first time were counted as farms if normally they could be expected to produce these minimum quantities of farm products.

All the land under the control of one person or partnership was included as one farm. Control may have been through ownership, or through lease, rental, or cropping arrangement.

The Census enumerator was not given the definition of a farm. He was instructed to obtain an agriculture questionnaire for every place that the operator considered a farm, for every place of 3 or more acres, whether or not it was considered a farm, and for certain specialized operations regardless of the size of the place. The specialized operations include greenhouses and nurseries, places having 100 or more poultry, or on which 300 or more dozen eggs were produced in 1949, and places with 3 or more hives of bees. Thus, agriculture questionnaires were filled for more places than those that qualified as farms.

The determination as to which reports were to be included in the tabulations as representing farms was made during the processing of the questionnaires in Washington. This procedure was followed in order that uniform criteria could be applied.

For the 1945 and earlier censuses of agriculture, the definition of a farm was somewhat more inclusive. Census enumerators were provided with the definition of a farm and were instructed

to fill reports only for those places which met the criteria. From 1925 to 1945, farms for Census purposes included places of 3 or more acres on which there were agricultural operations, and places of less than 3 acres with agricultural products for home use or for sale with a value of \$250 or more. For places of 3 or more acres, no minimum quantity of agricultural production was required for purposes of enumeration; for places of under 3 acres all the agricultural products valued at \$250 or more may have been for home use and not for sale. The only reports excluded from the tabulations were those taken in error and a few with very limited agricultural production such as only a small home garden, a few fruit trees, a very small flock of chickens, or the like. In 1945, reports for 3 acres or more with limited agricultural operations were retained if there were 3 or more acres of cropland and pasture, or if the value of products in 1944 amounted to \$150 or more when there was less than 3 acres of cropland and pasture.

The definition of a farm in the 1920 Census was similar to that used from 1925 to 1940 but was somewhat more inclusive. In that year, farms of less than 3 acres with products valued at less than \$250 were to be included, provided they required the continuous services of at least one person.

The change in the definition affected the comparability of the number of farms for 1950 and prior censuses. See "Effect of change in the definition of a farm."

**Farm operators.**—A "farm operator" is a person who operates a farm, either performing the labor himself or directly supervising it. He may be an owner, a hired manager, or a tenant, renter, or share cropper. If he rents land to others or has land cropped for him by others, he is listed as the operator of only that land which he retains. In the case of a partnership, one member was included as the operator. The number of farm operators is considered the same as the number of farms.

**Farms reporting or operators reporting.**—Figures for farms reporting or operators reporting, based on a tabulation of all farms, represent the number of farms, or farm operators, for which the specified item was reported. For example, if there were 190,222 farms in a State and only 146,500 had chickens on hand over 4 months old, the number of farms reporting chickens would be 146,500. The difference in the total number of farms, and the number of farms reporting an item, represents the number of farms not having that item, provided the inquiry was answered completely for all farms.

For some of the items, such as the age of operator, for which reports should have been obtained for all farms, figures are given for the number not reporting. These farms, or operators, not reporting indicate the extent of the incompleteness of the reports for the item.

Figures for farms reporting or operators reporting, based on a tabulation for only a sample of farms, represent the total estimated from the sample, not the actual number of farms reporting or operators reporting. In a few cases, the estimated total may exceed the actual number of farms or farm operators in the county or State.

**Land owned, rented, and managed.**—The land to be included in each farm was determined by asking the number of acres owned, the acres rented from or worked on shares for others, and the acres rented to or worked on shares by others. The acres in the farm were obtained by adding the acres owned and acres rented from or worked on shares by others, and subtracting the acres rented to or worked on shares by others. In case of a managed farm, the person in charge was asked the total acreage managed for his employer. From this total managed acreage was subtracted any of the acreage which was rented to or cropped by others. For 1950, the figures for land owned, land rented from others, and land managed by farm operators include land rented to others by farm operators.

In earlier censuses, the enumerator was instructed to include all land rented from others and to exclude all land rented to others. He recorded only that portion of the acreage owned and the acreage rented from others which was retained by the farm operator. Thus, the land included in each farm was essentially the same as that included in the 1950 Census.

**Land owned.**—Land owned includes all land which the operator or his wife, or both, hold under title, purchase contract, homestead law, or as one of the heirs, or as a trustee of an undivided estate.

**Land rented from others.**—Land rented from others includes land worked on shares for others, and land used rent free, as well as all land rented or leased under other arrangements. Grazing land used under government permit was not included.

**Land rented to others.**—Many farm operators rent land to others. For the most part, this land rented to others represents agricultural lands but it also includes tracts rented for residential or other purposes. When land is leased, rented, or cropped on shares, the tenant or cropper is considered the farm operator even though his landlord may exercise supervision over his operations. The landlord is considered as operating only that portion of the land not assigned to tenants or croppers.

**Land area.**—The approximate land area reported for 1950 for States and counties is, in general, the same as that reported for the 1945 and 1940 Censuses. Changes since 1940 represent changes in boundary, actual changes in land area due to the construction of reservoirs, etc. The figures for 1940 represent a complete re-measurement of the United States and therefore may be at variance with the figures shown for earlier censuses.

**Land in farms.**—The acreage designated "land in farms" includes considerable areas of land not actually under cultivation and some land not used for pasture or grazing. All woodland and wasteland owned by farm operators, or included in tracts rented from others, is included as land in farms unless such land was held for other than agricultural purposes, or unless the acreage of such land held by a farm operator was unusually large. If the total acreage of land owned, rented, or managed by a farm operator was 1,000 or more (5,000 or more in the Western States) and less than 10 percent of the total was used for crops, or for pasture or grazing, or was rented to others, any woodland not grazed and any wasteland, in excess of the acreage used for agricultural purposes, were excluded from the farm area.

Except for open range and grazing lands used under government permit, all grazing land was to be included as land in farms. Land used rent free was to be included with land rented from others. Grazing lands operated by grazing associations were to be returned in the name of the manager in charge. All land in Indian reservations used for growing crops, or grazing livestock, was to be included. Land in Indian reservations not reported by individual Indians or not rented to non-Indians was to be reported in the name of the cooperative group using the land. Thus, in some instances the entire reservation was reported as one farm.

#### CLASSIFICATION OF FARMS

**Farms by size.**—Farms were classified by size according to the total land area of each farm. The same classification was used for all States.

In analyzing size-of-farm statistics, consideration should be given to the definition of a farm for Census purposes. Census farms are essentially operating units—not ownership tracts. If a landlord has croppers or other tenants, the land assigned each cropper or tenant is a separate farm even though the landlord may operate the entire holding essentially as one farm in respect to supervision, equipment, rotation practices, purchase of supplies, or sale of products.

**Farms by tenure of operator.**—In the 1950 Census, farm operators are classified according to the tenure under which they hold their land on the basis of the replies to the inquiries on total land owned, total land rented from others, and total land managed for others. In 1945 and earlier, full owners, part owners, and tenants were classified on the basis of the land retained. Under this earlier classification, a part owner who sublets to others all the land he rents from others would have been classed a full owner; a part owner who rents to others all the land he owns would have been classed a tenant.

**Full owners own land but do not rent land from others.**

**Part owners own land and rent land from others.**

**Managers operate farms for others and are paid a wage or salary for their services.** Persons acting merely as caretakers or hired as laborers are not classified as managers. If a farm operator managed land for others and also operated land on his own account, the land operated on his own account was considered as one farm and the land managed for others as a second farm. In the 1950 Census, if a farm operator managed land for two or more employers all the land managed was considered one farm.

**Tenants rent from others or work on shares for others all the land they operate.** In 1950, tenants are further classified on the basis of their rental arrangement as follows:

**Cash tenants pay cash as rent, such as \$10 an acre or \$1,000 for the use of the farm.**

**Share-cash tenants pay a part of the rent in cash and a part as a share of the crops or of the livestock or livestock products.**

**Share tenants pay a share of either the crops or livestock or livestock products, or a share of both.**

**Crop-share tenants pay only a share of the crops.**

**Livestock-share tenants pay a share of the livestock or livestock products.** They may or may not also pay a share of the crops.

**Croppers are crop-share tenants whose landlords furnish all the work power.** The landlords either furnish all the work animals or furnish tractor power in lieu of work animals. Croppers usually work under the close supervision of the landowners or their agents and the land assigned them is often merely a part of a larger enterprise operated as a single unit.

The information on work power furnished was tabulated only for the Southern States and seven counties in southeastern Missouri. Therefore, data for croppers are shown only for the Southern States and seven counties in southeastern Missouri.

**Other tenants.**—Other tenants include those who pay a fixed quantity of any product; those who pay taxes, keep up the land and buildings, or keep the landlord in exchange for the use of the land; those who have the use of the land rent free; and others who could not be included in one of the other specified subclasses.

**Unspecified tenants.**—Unspecified tenants include those tenants whose rental agreement was not reported.

For earlier censuses, the definition for each subclass of tenants is nominally similar to the corresponding subclass, or subclasses, for 1950. However, in 1945 the enumerator was asked to determine the subclass of tenants, while in 1950, 1940, and earlier censuses the classification was made during the processing of the questionnaires in Washington on the basis of the answer to the inquiries on the questionnaires. The procedure for 1945 may have affected the comparability of the data, particularly those for cash tenants and share-cash tenants.

**Farms by color or race of operator.**—Farm operators are classified by color as "white" and "nonwhite." Nonwhite includes Negroes, Indians, Chinese, Japanese, and all other nonwhite races.

**Farms by economic class.**—A classification of farms by economic class was made for the purpose of segregating groups of farms that are somewhat alike in their characteristics. This classification was made in order to present an accurate description of the farms in each class and in order to provide basic data for an analysis of the organization of United States agriculture. Only the farms in the sample (one-fifth of the farms plus all large farms) were classified by economic class. The totals given in the tables represent estimates for all farms based on tabulations of the data for the farms included in the sample.

The classification of farms by economic class was made on the basis of three factors, namely, total value of all farm products sold, number of days the farm operator worked off the farm, and the relationship of the income received from nonfarm sources by the operator and members of his family to the value of all farm products sold. Institutions, experimental farms, grazing associations, and other community projects were classified as abnormal, regardless of any of the above-mentioned factors.

In making the classification of farms by economic class, farms have been grouped into two major groups, namely, commercial farms and other farms. In general, all farms with a value of sales of farm products amounting to \$1,200 or more were classified as commercial. Farms with a value of sales of \$250 to \$1,199 were classified as commercial only if the farm operator worked off the farm less than 100 days and the income of the farm operator and members of his family received from nonfarm sources was less than the total value of all farm products sold. Farms with a value of sales of all farm products of less than \$250, as well as county, State, private institutional, and experimental farms, were classified as "Other."

Commercial farms have been divided into six groups on the basis of the total value of farm products sold, as follows:

Class of farm	Value of farm products sold
I-----	\$25,000 or more.
II-----	10,000 to \$24,999.
III-----	5,000 to 9,999.
IV-----	2,500 to 4,999.
V-----	1,200 to 2,499.
VI-----	*250 to 1,199.

\*Provided the farm operator worked off the farm less than 100 days, and provided the income the farm operator and members of his family received from nonfarm sources was less than the value of all farm products sold.

Other farms have been grouped into three classes as follows:

**Part-time farms.**—Farms with a value of sales of farm products of \$250 to \$1,199 were classified as part time provided the farm operator reported (a) 100 or more days of work off the farm in 1949, or (b) the nonfarm income received by him and members of his family was greater than the value of farm products sold.

**Residential farms.**—Residential farms include all farms except abnormal farms with a total value of sales of farm products of less than \$250. Some of these represent farms on which the operator worked off the farm more than 100 days in 1949. Some represent farms on which the income from nonfarm sources was greater than the value of sales of agricultural products. Others represent subsistence and marginal farms of various kinds. Some farms are included here which, under normal conditions, would have qualified as commercial farms.

**Abnormal farms.**—Insofar as it was possible to identify them, abnormal farms include public and private institutional farms, community enterprises, experiment station farms, grazing associations, etc.

**Farms by type.**—The classification of farms by type was made on the basis of the relationship of the value of sales from a particular source or sources to the total value of all farm products sold from the farm. In some cases, the type of farm was determined on the basis of the sale of an individual farm product, such as cotton, or on the basis of closely related products, such as dairy products. In other cases, the type was determined on the basis of sales of a broader group of products such as corn, sorghum, all small grains, field peas, field beans, cowpeas, and soybeans. Residential and abnormal farms were not classified by type. In order to be classified as a particular type, sales or anticipated sales of a product or a group of products had to represent 50 percent or more of the total value of products of the farm.

Only the farms in the sample were classified by type.

The types of farms for which data are shown, together with the product or group of products that had to represent 50 percent or

more of the total sales in order for the farm to be so classified, are as follows:

Type of farm.	Product or group of products amounting to 50 percent or more of the value of all farm products sold.
Cotton-----	Cotton.
Cash-grain-----	Corn, sorghum, small grains, field peas, field beans, cowpeas, and soybeans.
Other field-crop-----	Peanuts, Irish potatoes, sweetpotatoes, tobacco, sugarcane, sugar beets for sugar, and other miscellaneous crops.
Vegetable-----	Vegetables.
Fruit-and-nut-----	Berries and other small fruits, and tree fruits and nuts.
Dairy-----	Milk and other dairy products.

The criterion of 50 percent of the total sales was modified in the case of dairy farms. A farm for which the value of sales of dairy products represented less than 50 percent of the total value of farm products sold was classified as a dairy farm if:

- (a) Milk and other dairy products accounted for 30 percent or more of the total value of products, and
- (b) Milk cows represented 50 percent or more of all cows, and
- (c) Sales of dairy products, together with the sales of cattle and calves, amounted to 50 percent or more of the total sales.

**Poultry**----- Chickens, eggs, turkeys, and other poultry products.

**Livestock farms other than dairy and poultry.** Cattle, calves, hogs, sheep, goats, wool, mohair, goat milk, and products from animals slaughtered on the farm, provided the farm did not already classify as a dairy farm.

**General**----- Farms were classified as general when the value of products from one source or group of sources did not represent as much as 50 percent of the total of the value of all farm products sold. Separate figures are given for three types of general farms:

- (a) Primarily crop.
- (b) Primarily livestock.
- (c) Crop and livestock.

**Primarily crop farms** are those for which the sale of one of the following crops or groups of crops—vegetables, fruits and nuts, cotton, cash grains, or other field crops—did not amount to 50 percent or more of the value of all farm products sold, but for which the value of sales for all these groups of crops represented 70 percent or more of the value of all farm products sold.

**Primarily livestock farms** are those which could not be classified as dairy farms, poultry farms, or livestock farms other than dairy and poultry, but on which the sale of livestock and poultry and livestock and poultry products amounted to 70 percent or more of the value of all farm products sold.

**General crop and livestock farms** are those which could not be classified as either crop farms or livestock farms, but on which the sale of all crops amounted to at least 30 percent but less than 70 percent of the value of all farm products sold.

**Miscellaneous**----- This group of farms includes those which had 50 percent or more of the total value of products accounted for by sale of horticultural products; or sale of horses; or sale of fur animals; or sale of forest products; or sale of bees, wax, and honey.

**Farms by class of work power.**—Farms have been grouped by class of work power on the basis of whether horses, mules, or tractors were reported. This classification does not present an entirely accurate picture of the work power used on all farms. For some farms, all the work power may be furnished by the landlord and for some farms all the work power may be hired. Thus, farms hiring all of the work power from others and those having it furnished may be shown as having no work power.

**Large farms.**—Large farms account for approximately one-fourth of the total production of farm products. Because of their importance, special efforts were made to insure the complete enumeration of all large farms. Prior to 1950, a list of all large farms was prepared from the records of the 1945 Census of Agriculture. Through a cooperative arrangement with the Bureau of Agricultural Economics, this list was checked and revised on the basis of available records in the various States by the State Statisticians as special agents of the Bureau of the Census. A list of these large farms was provided to District Supervisors and crew leaders and they were required to check to see that all such large farms were enumerated. A total of 62,781 large farms were on the lists sent to District Supervisors prior to the beginning of the enumeration. During the office processing, the list of large farms was checked against agriculture questionnaires enumerated and agriculture questionnaires or satisfactory explanations as to why an agriculture questionnaire was not required were obtained for all large farms that had not been enumerated.

The following criteria were used for determining whether a farm was to be classified as a large farm:

Criteria	Western States <sup>1</sup>	Other States
Land in farms.....	5,000 acres or more..	1,000 acres or more.
Total cropland (cropland harvested + cropland pastured + cropland not harvested or pastured)...	1,000 acres or more..	750 acres or more.
Cattle of all ages.....	500 or more.....	200 or more.
Sheep of all ages.....	4,000 or more.....	500 or more.
Value of farm products sold or to be sold.....	\$70,000 or more....	\$70,000 or more

<sup>1</sup> Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

In Alabama, Georgia, Mississippi, South Carolina, and Louisiana, and in specified counties in Kentucky, Maryland, Missouri, North Carolina, Tennessee, Virginia, Florida, Arkansas, and Texas, the criteria applied to the totals for the entire landlord-tenant operation, plantation, or other type of large farm holding. If the landlord-tenant operation qualified as a large farm, the home farm portion of the landlord-tenant operation was considered a large farm even though the home farm operating unit did not itself meet the criteria for a large farm.

The enumeration of large farms was checked in most cases by crew leaders, in accordance with the enumerator's instructions, as the additional information that was required to be obtained for only a sample of farms was also required to be obtained for all large farms that were not in the sample. All questionnaires for large farms were reviewed by members of the technical staff during the office processing. Information regarding the importance of large farms and their use in connection with the sample for the 1950 Census of Agriculture is given in table 4.

**Effect of change in the definition of a farm on data for the 1950 Census.**—The procedure of determining whether a place was to be counted as a farm and the definition of a farm were different for the 1950 Census from those for prior censuses. Prior to 1950, census enumerators were given a definition of a farm and were instructed to enumerate all places which would qualify as

farms. Generally, for censuses prior to 1950, census enumerators were instructed to enumerate as farms any place of less than 3 acres on which the value of products produced in the year preceding the census amounted to \$250 or more and also any places of 3 or more acres on which there were farm products produced during the year preceding the census. Census enumerators experienced considerable difficulty in applying this definition of a farm. For places less than 3 acres, it was necessary for the census enumerator to determine the value of farm products produced. Most of the farm products produced on such places were not sold but were consumed by the family of the operator. The securing of reports for such products involved difficulties not only in regard to the determination of the amount produced but also in regard to the price to be used in determining value. The price that would be received if such products were sold, would differ from the prices that would be paid if the products were purchased. For places of over 3 acres, it was necessary for the enumerator to determine if there had been any agricultural products produced during the preceding year before he filled an agriculture questionnaire. Quite often, census enumerators used the test of whether the place was locally considered a farm to determine if there was agricultural production on the place. There are a considerable number of places, not locally considered as farms, on which there is sufficient production of farm products to qualify such places as Census farms. The use of the test of whether such a place is locally considered a farm, did not always provide a satisfactory basis for determining that a place was to be enumerated and counted as a farm.

Because of the difficulties experienced by census enumerators in prior censuses in determining which places to enumerate as farms, it was decided to enumerate, for the 1950 Census of Agriculture, all places that might qualify as farms and then to use, during the office processing, uniform criteria for determining which places represented farms. Accordingly, census enumerators were instructed to enumerate all places locally called farms and also all places of 3 or more acres whether or not it was considered a farm and for certain specialized operations.

The procedure used for the 1950 Census resulted in the obtaining of reports for more than one million places that were not counted as farms. (See table 8.) These places contained over 48,000,000 acres of land and their area was equivalent to 4.2 percent of all land included in farms and 2.5 percent of the total land area in the United States. There were no agricultural operations on 785,000 of these places. The agricultural production on the 247,000 places with agricultural operations was not sufficient for these places to be counted as farms.

If the same criteria for determining if a place enumerated was a farm had been used during the office processing for the 1950 Census as for prior censuses, most of the 247,000 places would have been counted as farms. Most of these places represent country residences on which there is very little agricultural production.

It appears that the enumeration of places that might qualify as Census farms for the 1950 Census of Agriculture resulted in a more complete enumeration of farms. On the other hand, the use of a more restrictive definition of a farm, in 1950, resulted in the elimination of 247,000 places, most of which would have been counted as farms if the same criteria had been used in 1950 as during prior censuses.

The decrease in the number of farms from 5,859,169 in 1945 to 5,382,162 in 1950 resulted partly from a change in the definition of a farm. It is estimated that 150,000 to 170,000 of the decrease of 477,007 was the result of the change in the farm definition. Data in table 9 give the number of places with agricultural operations excluded from the count of farms in 1950 for three groups of counties. Of the 247,038 places with agricultural operations that were excluded from the count of farms,

42,458, or 17.2 percent, were in counties in which the number of farms increased from 1945 to 1950; 56,926, or 23.0 percent, were in counties in which the number of places excluded from the census equaled or exceeded the decrease in the number of farms; and 147,654, or 59.8 percent, were in counties in which the number of places excluded was less than the decrease in the number of farms.

The decrease in the number of farms because of the change in the farm definition affected primarily the number of farms, and the number of farms reporting farm equipment and farm facilities. The effect of the change in the farm definition on land in farms, cropland harvested, the number of livestock, the production of livestock products, and the acreage and production of crops, was very small, as most of the places excluded from the 1950 Census were country residences and part-time farms with small acreages, few livestock, and very small production of farm products.

**Completeness of coverage of the census.**—Estimates of the completeness of the coverage of the 1950 Census of Agriculture are available from two sources; (1) a re-enumeration made for a sample of approximately 6,000 farms, and (2) independently derived statistics such as those for cotton ginnings and sugarcane processing.

The re-enumeration of farms was made for a carefully designed sample comprising approximately 1,000 segments scattered among 220 counties or groups of counties. The objectives of this re-enumeration were (1) to identify and measure the errors in the Census counting of farms, and (2) to measure the reporting errors for farms enumerated in the census. A report will be issued

later further analyzing the errors in the Census count of farms and the reporting errors for farms included in the census.

On the basis of the re-enumeration, it is estimated that there was a net under-enumeration of 274,000 farms for the 1950 Census of Agriculture. This under-enumeration is the net difference between the estimate of farms not included in the census tabulations and of farms erroneously enumerated. Farms were counted as not being included in the census tabulations if (1) no record of them could be found in the Census of Agriculture, (2) they were not enumerated in the correct county, (3) they were not enumerated in the name of the farm operator or a member of his family, or (4) they were excluded from the census tabulations because they appeared not to represent census farms (i. e., did not meet the criteria for a farm). In general, farms were counted as being erroneously enumerated if (1) they were included more than once in the census tabulation, (2) the information obtained during the re-enumeration indicated that they did not meet the Census criteria for a farm, or (3) they were not enumerated in the name of the farm operator or a member of his family.

Figures for the net under-enumeration for farms and for selected items are shown in table 10. For the United States, the net under-enumeration was equivalent to 5.1 percent of the farms, 2.0 percent of all land in farms, and 2.1 percent of cropland harvested shown by the 1950 Census.

The data given in tables 10 and 11 indicate that a large part of the net error was for small farms with very limited production of farm products. The net under-enumeration of land in farms and cropland harvested was less than one-half the net under-enumeration for the number of farms. The figures in

Table 8 —NUMBER AND AREA OF PLACES ENUMERATED AND NOT COUNTED AS FARMS, BY DIVISIONS AND STATES: CENSUS OF 1950

Division or State	Number of places not counted as farms			Area of places not counted as farms <sup>1</sup>			Division or State	Number of places not counted as farms			Area of places not counted as farms <sup>1</sup>			
	Total	With agricultural operations	With no agricultural operations	Total	Percent of land in farms	Percent of total land area		Total	With agricultural operations	With no agricultural operations	Total	Percent of land in farms	Percent of total land area	
United States.....	1,032,475	247,036	785,437	48,116,273	4.2	2.5	West North Central—Con.							
The North.....	544,732	111,053	433,679	20,698,826	4.7	3.5	South Dakota.....	1,973	508	1,465	97,497	0.2	0.2	
The South.....	376,329	101,729	274,600	18,292,152	4.7	3.3	Nebraska.....	3,593	1,648	1,945	192,285	0.4	0.4	
The West.....	111,414	34,256	77,158	9,125,295	2.8	1.2	Kansas.....	8,826	3,380	5,446	515,445	1.1	1.0	
Geographic Divisions:							South Atlantic:							
New England.....	99,569	12,345	87,224	3,896,110	31.1	9.6	Delaware.....	2,339	773	1,566	109,584	12.9	6.7	
Middle Atlantic.....	154,680	26,908	127,772	6,856,623	21.5	10.7	Maryland.....	14,467	2,597	11,870	396,351	9.8	6.3	
East North Central.....	210,397	51,339	159,058	6,677,320	6.0	4.3	District of Columbia.....	15	11	4	973	76.9	2.5	
West North Central.....	80,086	20,461	59,625	3,268,773	1.1	1.0	Virginia.....	36,793	9,048	27,745	1,127,764	7.2	4.4	
South Atlantic.....	179,530	43,224	136,306	8,179,536	8.0	4.8	West Virginia.....	25,007	7,403	17,604	956,220	11.6	6.2	
East South Central.....	96,090	30,552	65,538	3,661,833	4.6	3.2	North Carolina.....	33,075	7,003	26,072	885,263	4.6	2.8	
West South Central.....	100,709	27,953	72,756	6,450,783	3.1	2.3	South Carolina.....	14,982	3,600	11,382	658,252	5.5	3.4	
Mountain.....	27,572	8,414	19,158	5,332,387	2.1	1.0	Georgia.....	28,995	7,612	21,383	1,907,812	7.4	5.1	
Pacific.....	83,847	25,842	58,000	3,792,908	5.1	1.9	Florida.....	23,857	5,177	18,680	2,137,317	12.9	6.2	
New England:							East South Central:							
Maine.....	19,336	2,199	17,137	984,645	23.5	5.0	Kentucky.....	29,808	11,024	18,784	1,348,954	6.9	5.3	
New Hampshire.....	13,443	1,596	11,847	661,504	38.6	11.5	Tennessee.....	28,926	8,514	20,412	767,542	4.1	2.9	
Vermont.....	7,354	858	6,496	383,729	10.9	6.5	Alabama.....	21,483	6,064	15,419	847,559	4.1	2.6	
Massachusetts.....	35,203	4,858	30,345	1,067,449	64.3	21.2	Mississippi.....	15,873	4,950	10,923	697,778	3.4	2.3	
Rhode Island.....	4,757	513	4,244	238,412	124.8	35.2	West South Central:							
Connecticut.....	19,476	2,321	17,155	560,371	44.0	17.9	Arkansas.....	21,703	7,224	14,479	861,367	4.6	2.6	
Middle Atlantic:							Louisiana.....	18,868	4,628	14,240	746,363	6.7	2.6	
New York.....	66,765	10,496	56,269	3,754,667	23.4	12.2	Oklahoma.....	18,444	6,580	11,864	1,003,858	2.8	2.3	
New Jersey.....	16,978	3,582	13,396	450,013	26.1	9.3	Texas.....	41,694	9,521	32,173	3,839,195	2.6	2.3	
Pennsylvania.....	70,937	12,830	58,107	2,651,943	18.8	9.2	Mountain:							
East North Central:							Montana.....	3,341	824	2,517	580,345	1.0	0.6	
Ohio.....	61,875	17,026	44,849	1,573,258	7.5	6.0	Idaho.....	3,409	820	2,589	306,198	2.3	0.6	
Indiana.....	33,264	9,421	23,843	832,093	4.2	3.6	Wyoming.....	1,380	364	1,016	171,075	0.5	0.3	
Illinois.....	53,421	6,071	47,350	555,163	1.8	1.6	Colorado.....	7,502	2,370	5,132	2,043,877	5.4	3.1	
Michigan.....	65,535	12,260	53,275	2,461,703	14.3	6.7	New Mexico.....	4,854	2,155	2,699	754,742	1.6	1.0	
Wisconsin.....	26,302	6,561	19,741	1,255,103	5.4	3.6	Arizona.....	4,308	945	3,363	420,145	1.1	0.6	
West North Central:							Utah.....	2,011	725	1,286	203,455	1.9	0.4	
Minnesota.....	23,516	4,792	18,724	873,773	2.7	1.7	Nevada.....	767	211	556	852,550	12.1	1.2	
Iowa.....	8,268	2,457	5,811	184,451	0.5	0.5	Pacific:							
Missouri.....	32,287	7,089	25,198	1,256,254	3.6	2.8	Washington.....	29,504	8,544	20,960	798,724	4.6	1.9	
North Dakota.....	1,623	587	1,036	149,068	0.4	0.3	Oregon.....	17,571	5,468	12,103	602,377	3.0	1.0	
							California.....	36,767	11,830	24,937	2,391,807	6.5	2.4	

<sup>1</sup>Area not reported for 63,283 places.

Table 9.—CHANGE IN NUMBER OF FARMS, 1940 TO 1950, AND NUMBER OF PLACES WITH AGRICULTURAL OPERATIONS EXCLUDED FROM THE COUNT OF FARMS FOR 1950: BY DIVISIONS AND STATES

Region, division, and State	Number of farms			Increase or decrease in number of farms			Total number of places	Places with agricultural operations excluded from the count of farms for 1950				
	1950	1945	1940	1945-50	1940-50	1940-45		Number of counties	Number of places	Number of farms		
										1950	1945	1940
United States.....	5,382,162	5,859,169	6,096,799	-477,007	-714,637	-237,630	247,038	667	42,458	1,239,523	1,158,205	1,244,325
The North.....	2,268,066	2,403,578	2,579,959	-215,512	-311,893	-96,381	111,053	176	8,228	262,783	251,273	288,146
The South.....	2,652,423	2,881,135	3,007,170	-228,712	-354,747	-126,035	101,729	379	25,467	824,136	765,154	803,795
The West.....	461,673	494,456	509,670	-32,783	-47,997	-15,214	34,256	112	8,763	152,604	141,778	152,384
<b>Geographic Divisions:</b>												
New England.....	103,225	150,311	135,190	-47,086	-31,965	15,121	12,345					
Middle Atlantic.....	296,702	347,477	348,100	-50,775	-51,398	-623	26,908	15	1,976	14,352	12,999	12,262
East North Central.....	885,404	953,797	1,006,095	-68,393	-120,691	-52,298	51,339	43	3,454	78,940	76,713	97,985
West North Central.....	982,735	1,031,993	1,090,574	-49,258	-107,839	-58,581	20,461	118	2,798	169,491	161,561	177,899
South Atlantic.....	958,998	1,043,475	1,019,451	-84,477	-60,453	24,024	43,224	146	10,195	317,877	295,462	295,725
East South Central.....	913,002	959,829	1,023,349	-46,827	-110,347	-63,520	30,552	139	9,670	363,855	338,497	376,714
West South Central.....	780,423	877,831	964,370	-97,408	-183,947	-86,539	27,953	94	5,602	142,404	131,195	131,356
Mountain.....	194,858	212,527	233,497	-17,669	-38,639	-20,970	8,414	72	2,041	58,951	55,219	63,660
Pacific.....	266,815	281,929	276,173	-15,114	-9,358	5,756	25,842	40	6,722	93,653	86,559	88,724
New England:												
Maine.....	30,358	42,184	38,980	-11,826	-8,622	3,204	2,199					
New Hampshire.....	13,391	18,786	16,554	-5,395	-3,163	2,232	1,596					
Vermont.....	19,043	26,490	23,582	-7,447	-4,539	2,908	858					
Massachusetts.....	22,220	37,007	31,897	-14,787	-9,677	5,110	4,858					
Rhode Island.....	2,598	3,603	3,014	-1,005	-416	589	513					
Connecticut.....	15,615	22,241	21,163	-6,626	-5,548	1,078	2,321					
Middle Atlantic:												
New York.....	124,977	149,490	153,238	-24,513	-28,261	-3,748	10,496	4	684	2,773	2,597	494
New Jersey.....	24,838	26,226	25,835	-1,388	-997	391	3,582	8	1,055	8,440	7,321	8,026
Pennsylvania.....	146,887	171,761	169,027	-24,874	-22,140	2,734	12,830	3	237	3,139	3,081	3,742
East North Central:												
Ohio.....	199,359	220,575	233,783	-21,216	-34,424	-13,208	17,026	3	134	6,252	6,090	6,813
Indiana.....	166,627	175,970	184,549	-9,343	-17,922	-8,579	9,421	19	1,472	30,471	29,487	32,448
Illinois.....	195,268	204,239	213,439	-8,971	-18,171	-9,200	6,071	15	830	27,508	26,871	42,552
Michigan.....	155,589	175,268	187,589	-19,679	-32,000	-12,321	12,260	3	293	4,970	4,819	5,849
Wisconsin.....	168,561	177,745	186,735	-9,184	-18,174	-8,990	6,561	3	725	9,739	9,446	10,323
West North Central:												
Minnesota.....	179,101	188,952	197,351	-9,851	-18,250	-8,399	4,792	18	331	33,318	32,754	32,516
Iowa.....	203,159	208,934	213,318	-5,775	-10,159	-4,384	2,457	17	274	33,810	33,341	34,398
Missouri.....	230,405	242,934	256,100	-12,889	-26,055	-13,166	7,089	20	1,249	39,751	38,751	43,629
North Dakota.....	65,401	69,520	73,962	-4,119	-8,561	-4,442	587	6	63	6,028	5,941	6,413
South Dakota.....	66,452	68,705	72,454	-2,253	-6,002	-3,749	508	22	181	25,124	24,610	26,090
Nebraska.....	107,183	111,756	121,062	-4,573	-13,879	-9,306	1,648	16	301	17,384	13,177	18,901
Kansas.....	131,394	141,192	156,327	-9,798	-24,933	-15,135	3,380	19	399	14,076	12,987	15,952
South Atlantic:												
Delaware.....	7,448	9,296	8,994	-1,848	-1,546	302	773					
Maryland.....	36,107	41,275	42,110	-5,168	-6,003	-835	2,597	3	387	4,757	4,453	4,441
District of Columbia.....	28	40	65	-12	-37	-25	11					
Virginia.....	150,997	173,051	174,885	-22,054	-23,888	-1,834	9,048	15	1,012	23,365	22,056	22,853
West Virginia.....	81,434	97,600	99,282	-16,166	-17,848	-1,682	7,403	6	612	9,292	9,142	9,855
North Carolina.....	288,508	287,412	278,276	1,096	10,232	9,136	7,003	45	3,595	156,742	145,812	145,217
South Carolina.....	139,364	147,745	137,558	-8,381	1,806	10,187	3,600	15	698	56,426	52,226	48,377
Georgia.....	198,191	225,897	216,033	-27,706	-17,842	9,864	7,612	35	1,703	42,746	39,952	41,882
Florida.....	56,921	61,159	62,248	-4,238	-5,327	-1,089	5,177	27	2,188	24,549	21,821	23,100
East South Central:												
Kentucky.....	218,476	238,501	252,894	-20,025	-34,418	-14,393	11,024	34	2,428	73,323	67,018	78,379
Tennessee.....	231,631	234,431	247,617	-2,800	-15,986	-13,186	8,514	52	3,267	122,018	114,517	126,567
Alabama.....	211,512	223,369	231,746	-11,857	-20,234	-8,377	6,064	20	1,804	76,037	69,911	75,136
Mississippi.....	251,383	263,528	291,092	-12,145	-39,709	-27,564	4,950	33	2,171	92,477	87,051	96,632
West South Central:												
Arkansas.....	182,429	198,769	216,674	-16,340	-34,245	-17,905	7,224	20	1,786	46,971	44,488	53,496
Louisiana.....	124,181	129,295	150,007	-5,114	-25,826	-20,712	4,628	23	2,361	49,389	45,031	52,155
Oklahoma.....	142,246	164,790	179,687	-22,544	-37,441	-14,897	6,580	6	384	8,361	8,001	9,635
Texas.....	331,567	384,977	418,002	-53,410	-86,435	-33,025	9,521	45	1,071	37,683	33,675	16,070
Mountain:												
Montana.....	35,085	37,747	41,823	-2,662	-6,738	-4,076	824	9	190	5,799	5,604	6,298
Idaho.....	40,284	41,498	43,663	-1,214	-3,379	-2,165	820	17	265	19,213	17,863	18,523
Wyoming.....	12,614	13,076	15,018	-462	-2,404	-1,942	364	5	69	3,483	3,283	3,676
Colorado.....	45,578	47,618	51,436	-2,040	-5,858	-3,818	2,370	17	704	16,053	15,243	16,556
New Mexico.....	23,599	29,695	34,105	-6,096	-10,506	-4,410	2,155	4	221	3,336	2,949	3,934
Arizona.....	10,412	13,142	18,468	-2,730	-8,056	-5,326	945	3	421	2,251	1,839	5,361
Utah.....	24,176	26,322	25,411	-2,146	-1,235	911	725	12	134	7,934	7,600	8,493
Nevada.....	3,110	3,429	3,573	-319	-463	-144	211	5	37	882	838	819
Pacific:												
Washington.....	69,820	79,887	81,686	-10,067	-11,866	-1,799	8,544	8	1,370	13,449	12,825	14,132
Oregon.....	59,827	63,125	61,829	-3,298	-2,002	1,296	5,468	8	1,222	17,095	16,237	16,556
California.....	137,168	138,917	132,658	-1,749	4,510	6,259	11,830	24	4,130	63,109	57,497	58,036

Table 9.—CHANGE IN NUMBER OF FARMS, 1940 TO 1950, AND NUMBER OF PLACES WITH AGRICULTURAL OPERATIONS EXCLUDED FROM THE COUNT OF FARMS FOR 1950; BY DIVISIONS AND STATES—Continued

Region, division, and State	Places with agricultural operations excluded from the count of farms for 1950—Continued									
	In counties where number of places excluded equals or exceeds decrease in number of farms, 1945-50					In counties where number of places excluded is less than decrease in number of farms, 1945-50				
	Number of counties	Number of places	Number of farms			Number of counties	Number of places	Number of farms		
			1950	1945	1940			1950	1945	1940
1 United States.....	378	56,926	718,161	749,412	803,194	2,026	147,654	3,424,478	3,951,552	4,049,280
2 The North.....	202	30,340	408,820	425,967	442,027	894	72,485	1,596,463	1,806,338	1,849,786
3 The South.....	109	13,917	197,907	205,254	244,819	900	62,345	1,630,380	1,910,727	1,958,556
4 The West.....	67	12,669	111,434	118,191	116,348	232	12,824	197,635	234,487	240,938
<b>Geographic Divisions:</b>										
5 New England.....	1	856	1,249	1,531	1,229	66	11,489	101,976	148,780	133,961
6 Middle Atlantic.....	24	5,209	43,363	46,610	47,597	110	19,723	238,987	287,868	288,241
7 East North Central.....	106	19,481	227,733	238,144	245,290	287	28,404	578,731	638,940	662,820
8 West North Central.....	71	4,794	136,475	139,682	147,911	431	12,869	676,769	730,750	764,764
9 South Atlantic.....	50	6,377	77,681	81,110	84,079	358	26,652	563,440	666,903	639,647
10 East South Central.....	34	4,597	74,194	76,686	81,983	191	16,285	474,953	544,646	564,652
11 West South Central.....	25	2,943	46,032	47,458	78,757	351	19,408	591,987	699,178	754,257
12 Mountain.....	29	1,382	23,367	24,238	27,954	177	4,991	112,540	133,070	141,883
13 Pacific.....	38	11,287	88,067	93,953	88,394	55	7,833	85,095	101,417	99,055
<b>New England:</b>										
14 Maine.....	.....	.....	.....	.....	.....	16	2,199	30,358	42,184	38,980
15 New Hampshire.....	.....	.....	.....	.....	.....	10	1,596	13,391	18,786	16,554
16 Vermont.....	.....	.....	.....	.....	.....	14	858	19,043	26,490	23,582
17 Massachusetts.....	1	856	1,249	1,531	1,229	13	4,002	20,971	35,476	30,668
18 Rhode Island.....	.....	.....	.....	.....	.....	5	513	2,598	3,603	3,014
19 Connecticut.....	.....	.....	.....	.....	.....	8	2,321	15,615	22,241	21,163
<b>Middle Atlantic:</b>										
20 New York.....	8	1,434	11,346	12,146	12,558	49	8,378	110,858	134,747	140,186
21 New Jersey.....	7	1,761	9,103	10,219	9,455	6	766	7,295	8,686	8,354
22 Pennsylvania.....	9	2,014	22,914	24,245	25,584	55	10,579	120,834	144,435	139,701
<b>East North Central:</b>										
23 Ohio.....	27	8,043	61,961	66,813	73,648	58	8,849	131,146	147,672	153,322
24 Indiana.....	29	3,812	55,352	56,898	60,397	44	4,137	80,804	89,585	91,704
25 Illinois.....	18	2,282	38,933	40,078	28,938	69	2,959	128,827	137,290	141,949
26 Michigan.....	19	3,700	40,624	42,602	48,090	61	8,267	109,995	127,847	133,650
27 Wisconsin.....	13	1,644	30,863	31,753	34,217	55	4,192	127,959	136,546	142,195
<b>West North Central:</b>										
28 Minnesota.....	14	944	28,473	29,020	30,981	55	3,517	117,310	127,178	133,854
29 Iowa.....	13	636	28,250	28,563	29,502	69	1,547	141,099	147,030	149,418
30 Missouri.....	24	2,385	49,301	50,983	55,011	71	3,455	140,993	153,200	157,460
31 North Dakota.....	3	39	2,701	2,705	2,940	44	485	56,672	60,874	64,609
32 South Dakota.....	.....	.....	.....	.....	.....	46	327	41,328	44,095	46,364
33 Nebraska.....	8	269	13,247	13,640	14,741	69	1,078	76,552	84,939	87,420
34 Kansas.....	9	521	14,503	14,771	14,736	77	2,460	102,815	113,434	125,639
<b>South Atlantic:</b>										
35 Delaware.....	.....	.....	.....	.....	.....	3	773	7,448	9,296	8,994
36 Maryland.....	4	441	3,685	4,060	4,440	17	1,769	27,665	32,762	33,229
37 District of Columbia.....	.....	.....	.....	.....	.....	.....	11	28	40	65
38 Virginia.....	11	1,538	11,158	12,105	12,796	74	6,498	116,474	138,890	139,236
39 West Virginia.....	4	894	8,802	9,152	10,277	45	5,897	63,340	79,306	79,150
40 North Carolina.....	9	963	22,019	22,455	22,643	46	2,445	109,747	119,145	110,416
41 South Carolina.....	2	421	7,861	8,124	7,836	29	2,481	75,077	87,395	81,345
42 Georgia.....	12	1,383	17,653	18,350	18,838	112	4,526	137,792	167,595	155,313
43 Florida.....	8	737	6,503	6,864	7,249	32	2,252	25,869	32,474	31,899
<b>East South Central:</b>										
44 Kentucky.....	14	1,242	27,243	27,795	30,601	72	7,354	117,910	143,688	143,914
45 Tennessee.....	10	1,879	20,266	21,100	21,900	33	3,368	89,347	98,814	99,150
46 Alabama.....	6	964	17,937	18,720	19,564	41	3,296	117,538	134,738	137,046
47 Mississippi.....	4	512	8,748	9,071	9,918	45	2,267	150,158	167,406	184,542
<b>West South Central:</b>										
48 Arkansas.....	10	1,429	19,241	19,918	22,239	45	4,009	116,217	134,363	140,939
49 Louisiana.....	4	253	6,021	6,211	6,163	37	2,014	68,771	78,053	91,689
50 Oklahoma.....	3	540	7,712	7,831	9,696	68	5,656	126,173	148,958	160,356
51 Texas.....	8	721	13,058	13,498	40,659	201	7,729	280,826	337,804	361,273
<b>Mountain:</b>										
52 Montana.....	5	189	3,116	3,288	3,612	42	445	26,170	28,855	31,913
53 Idaho.....	1	78	2,503	2,545	2,689	26	477	18,568	21,090	22,451
54 Wyoming.....	6	169	3,757	3,835	4,482	13	126	5,374	5,958	6,860
55 Colorado.....	7	550	7,586	7,914	8,237	39	1,116	21,939	24,461	26,643
56 New Mexico.....	2	157	2,336	2,421	2,802	25	1,777	17,927	24,325	27,369
57 Arizona.....	1	37	423	430	2,448	10	487	7,738	10,873	10,659
58 Utah.....	5	197	3,501	3,659	3,551	12	394	12,741	15,063	13,367
59 Nevada.....	2	5	145	146	133	10	169	2,083	2,445	2,621
<b>Pacific:</b>										
60 Washington.....	8	2,616	12,445	13,872	13,727	23	4,558	43,926	53,190	53,827
61 Oregon.....	11	2,683	22,937	24,248	23,515	17	1,563	19,795	22,640	21,758
62 California.....	19	5,988	52,685	55,833	51,152	15	1,712	21,374	25,587	23,470

table 11 indicate that one-fourth of the net under-enumeration was for farms of less than 10 acres; over a third for farms of 10 to 49 acres; a sixth for farms 100 to 220 acres; and less than one-twentieth for farms of 220 acres and over.

Less than one-fifth of the net under-enumeration was for commercial farms. More than one-third of the farms counted as not included in the census were enumerated for the census but were not included in the census tabulations because the information obtained by the census enumerator indicated that the agricultural operations were not sufficient to meet the Census criteria for a farm.

The re-enumeration was subject to errors of enumeration and office processing. However, the enumerators for the re-enumeration were carefully selected and given much more intensive training and supervision than the census enumerators. During the office processing, information for each farm identified during the re-enumeration was carefully compared with the information for the same farm enumerated in the census.

The re-enumeration was made for a probability sample and estimates of sampling reliability can be made. These estimates of sampling reliability for the net enumeration are given in tables 10 and 11. These estimates are to be interpreted as follows:

The chances are about 2 out of 3 that the estimates of net under-enumeration given in table 10 would differ from those obtained by a complete re-enumeration of all farms by amounts less than the absolute sampling errors indicated in the table. The chances are about 19 out of 20 that the estimates are within twice the absolute sampling errors of the figures which would result from a re-enumeration of all farms.

Data compiled independently of the census provide partial measures of the completeness of the coverage of the census. Data regarding cotton ginnings and sugar beet and sugarcane processing have been obtained independently from processors of these farm products. The entire production of cotton, sugar beets for sugar, and sugarcane for sugar are processed, hence the data on the total amount of these products processed provide accurate measures of the total production. Data obtained from operators of cotton gins showed the 1949 production of cotton to be 15,908,591 running bales. This was 489,143 running bales or 3.2 percent greater than the amount reported for the census. The reports obtained from operators of sugar beet factories by the Bureau of Agricultural Economics of the United States Department of Agriculture showed that the total production of sugar beets in 1949 was 10,148,000 tons. This compares with 9,944,016 tons reported for the census. The production of sugarcane for sugar in the United States, according to reports obtained from sugar mills by the United States Department of Agriculture was 6,110,000 tons. The production of sugarcane for sugar according to the census was 6,301,196 tons, or 3.1 percent more than reported by operators of sugar mills.

A comparison of data obtained in the 1950 Censuses of Agriculture and Irrigation also provides a partial measure of the completeness of coverage of the census in 20 States. Reports for the 1950 Census of Irrigation were obtained from enterprises supplying irrigation water to farms in the 17 Western States and Arkansas, Florida, and Louisiana. According to the 1950 Census of Irrigation, the total area irrigated in the 17 Western States and Arkansas, Florida, and Louisiana in 1949 was 26,233,215 acres. The area of land irrigated in these 20 States according to the 1950 Census of Agriculture was 25,634,869 acres, or 2.3 percent less than shown by the 1950 Census of Irrigation.

Data are not now available to indicate the accuracy of census totals for many characteristics. Totals for many characteristics are affected not only by the incompleteness of coverage, but also by various kinds of reporting errors. Adequate check data from independent sources are not available to provide a measure of the effect of these reporting errors upon census totals.

**Availability of data for geographic areas.**—Four different geographic areas—minor civil divisions, counties, State economic

areas, and States—were used as geographic units for the tabulation of data for the 1950 Census of Agriculture.

Minor civil divisions are primary subdivisions of counties and include townships, towns, precincts, election districts, magisterial districts, school districts, civil districts, beats, etc. Counties are the smallest areas for which data for the 1950 Census of Agriculture are published. There were 3,101 counties, including independent cities, in the United States at the date of the census.

State economic areas represent groupings of counties within a State. A map showing the State economic areas in each State appears in Volume I of the reports of the 1950 Census of Agriculture. The counties comprising a State economic area have similar agricultural, demographic, climatic, physiographic, and cultural characteristics. Basically, State economic areas have been established for the purpose of presenting statistics not only for the 1950 Census of Agriculture but also for the Censuses of Population and Housing. In order to establish areas for all 3 of these censuses, the 48 States have been subdivided into 501 State economic areas. (A description of State economic areas and a map showing the State economic areas for all States appears in the Special Report of the 1950 Census entitled, "State Economic Areas: A Description of the Procedure Used in Making a Functional Grouping of the Counties in the United States.") For the purpose of presenting agricultural statistics, most metropolitan areas have been combined with adjacent economic areas when the number of farms and agricultural production of the metropolitan area are of small importance. On the other hand, in a few cases, because of significant differences in the characteristics of the agriculture within the State economic areas, some State economic areas have been subdivided in order to present statistics for the 1950 Census of Agriculture. Outside the metropolitan areas, the State economic areas in general are the same as State type-of-farming areas. For the United States, detailed statistics are shown for 362 State economic areas.

Generally, totals and the number of farms reporting for all items on the agriculture questionnaire, except items covered by questions 230 to 238 and questions 306 through 332, were tabulated by minor civil divisions. Data for questions 306 through 332 were enumerated for a sample of approximately 20 percent of the farms. A sample of this size would not provide figures of sufficient reliability for most uses by minor civil divisions. None of the data tabulated by minor civil divisions have been published by the Bureau of the Census. Statistical tables containing data by minor civil divisions can be obtained by paying the cost of preparing the statistical tables and checking the data.

Totals and the number of farms reporting are available, and published in most cases, by counties for all items, except farm taxes, farm mortgage indebtedness, and cash rent, included in the 1950 Census of Agriculture. These data are given in Volume I of the reports for the 1950 Census of Agriculture. In some cases, the figures, particularly for crops of minor importance, are not published by counties. However, totals for such items are published in the various State tables in Volume I. Data for farm taxes and cash rent are available only for States and are given in State Tables 17 and 18 of Volume I. Data on farm mortgage indebtedness are available only by States and appear in part 8 of Volume V.

The data published by State economic areas consist primarily of those relating to some special counts or tabulations for farms or farm operators and to cross tabulations. The special counts and tabulations include farm operators classified by age and by year they began operation of their present farm; farms reporting woodland pastured and woodland not pastured classified by acreage; farm workers classified by basis of payment and perquisites furnished; farms reporting farm workers classified by number of workers; farms reporting horses and/or mules,

sows and gilts for spring farrowing, and farm slaughter, by number of animals; farms reporting and number of chickens 4 months old and over, farms reporting and number of chickens sold, and farms reporting and dozens of eggs sold, by size of flock; farms reporting and number of cows milked yesterday, farms reporting and value of dairy products sold, farms reporting, amount, and value of whole milk sold, farms reporting pounds of butterfat, and value of cream sold, by size of herd; farms reporting the principal crops classified by acreage harvested; farms reporting grain crops sold and hay sold classified by quantity sold; farms reporting, acres, and bushels harvested for Irish potatoes by acreage

TABLE 10.—ESTIMATES OF THE NET UNDER-ENUMERATION FOR FARMS AND SELECTED ITEMS FOR REGIONS AND THE UNITED STATES: 1950 CENSUS OF AGRICULTURE

Region and Item	Census total	Estimated net under-enumeration			
		Number (thousands)	Percent of census total	Absolute sampling error of estimate	
				Amount (thousands)	Percent
<b>United States</b>					
Farms..... number.....	5,382,162	274	5.1	36	0.7
Land in farms..... acres.....	1,169,789,020	22,903	2.0	6,353	0.5
Cropland harvested..... acres.....	345,528,410	7,376	2.1	2,051	0.6
Corn harvested..... acres.....	83,351,015	1,073	1.3	141	0.2
..... bushels.....	2,278,190,131	28,340	1.2	10,859	0.4
Wheat harvested..... acres.....	71,161,061	1,150	1.6	1,300	1.8
Cotton harvested..... acres.....	26,599,283	2,101	7.9	912	3.4
..... bales.....	15,419,458	665	4.3	295	1.9
Chicken eggs sold..... dozens.....	2,409,646,763	57,232	2.4	13,027	0.5
<b>The North</b>					
Farms..... number.....	2,268,066	101	4.5	25	1.1
Land in farms..... acres.....	441,225,732	4,764	1.1	2,724	0.6
Cropland harvested..... acres.....	208,493,139	2,083	1.0	1,538	0.7
Corn harvested..... acres.....	59,616,589	254	0.4	201	0.3
..... bushels.....	2,270,572,674	7,929	0.3	9,884	0.4
Wheat harvested..... acres.....	43,133,010	642	2.2	1,013	2.3
Chicken eggs sold..... dozens.....	1,767,742,459	33,435	1.9	12,553	0.7
<b>The South</b>					
Farms..... number.....	2,652,423	143	5.4	34	1.3
Land in farms..... acres.....	394,237,003	10,699	2.7	2,659	0.7
Cropland harvested..... acres.....	97,073,641	4,644	4.8	1,303	1.3
Corn harvested..... acres.....	22,674,275	771	3.4	197	0.9
..... bushels.....	491,044,722	19,547	4.0	4,441	0.9
Wheat harvested..... acres.....	13,823,923	190	1.4	162	1.2
Chicken eggs sold..... dozens.....	340,368,973	12,903	3.7	2,943	0.8
<b>The West</b>					
Farms..... number.....	461,673	30	6.5	11	2.4
Land in farms..... acres.....	324,325,385	7,450	2.3	5,086	1.6
Cropland harvested..... acres.....	39,961,630	649	1.6	379	0.9
Corn harvested..... acres.....	1,060,151	48	4.5	27	2.5
..... bushels.....	16,572,735	864	5.2	696	4.2
Wheat harvested..... acres.....	14,204,128	18	0.1	45	0.3
Chicken eggs sold..... dozens.....	295,535,331	10,894	3.7	1,858	0.6

harvested; farms reporting apples and peaches classified by number of trees not of bearing age, trees of bearing age, and quantity harvested.

Nearly all of the data regarding the number and characteristics of farms classified by size of farm, color and tenure of farm operator, type of farm and economic class of farm were tabulated and published by State economic areas. The data available, and in nearly all cases, published, for the four classifications of farms by State economic areas, are indicated by table 12. The data tabulated for these classifications of farms represent estimates based upon a sample of farms. Data are published by counties in Volume I for the number of farms, and for all land in farms for farms classified by size of farm and by tenure of operator (color and tenure of operator in the Southern States). Figures for the number of farms by color of operator, the number of farms by type of farm, and by economic class of farm, and for farms reporting and acreage of cropland harvested by tenure of operator appear in Volume I. Unpublished data are available for counties for the number of farms reporting and the acreage of land in farms classified by size of farm and by tenure of operator (color and tenure of operator for the Southern States).

Totals for all data tabulated for the 1950 Census of Agriculture are available and are published in nearly all cases for the 48 States and the District of Columbia. These totals are usually given in Volume I of the reports of the 1950 Census of Agriculture. These totals also appear in most cases in the analytical tables presented in this volume.

TABLE 11.—ESTIMATED NET UNDER-ENUMERATION OF FARMS IN THE 1950 CENSUS OF AGRICULTURE, BY SIZE OF FARM, FOR THE UNITED STATES

Size of farm	Census total	Estimated net under-enumeration of farms				
		Number (thousands)	Percent of census total	Percent of net under-enumeration	Absolute sampling error of estimate	
					Number (thousands)	Percent
<b>Total</b> .....	<b>5,382,162</b>	<b>274</b>	<b>5.1</b>	<b>100.0</b>	<b>36</b>	<b>0.7</b>
Under 10 acres.....	484,914	80	16.5	29.2	22	4.6
10-49 acres.....	1,477,850	101	6.8	36.9	19	1.3
50-99 acres.....	1,047,801	42	4.0	15.3	17	1.6
100-219 acres.....	1,377,571	42	3.0	15.3	15	1.1
200 acres and over.....	994,026	9	0.9	3.3	4	0.4

Table 12.—LIST OF ITEMS FOR WHICH DATA ARE PUBLISHED BY SIZE OF FARM, COLOR AND TENURE OF OPERATOR, TYPE OF FARM, AND ECONOMIC CLASS OF FARM, FOR THE 1950 CENSUS OF AGRICULTURE

Item	Item—Continued
<b>FARMS, ACREAGE, AND VALUE</b>	
Farms.....	number.....
Land owned by farm operators.....	farms reporting..
.....	acres.....
Land rented from others by farm operators.....	farms reporting..
.....	acres.....
Land managed by farm operators.....	farms reporting..
.....	acres.....
Land rented to others by farm operators.....	farms reporting..
.....	acres.....
Land in farms.....	acres.....
Average size of farm.....	average per farm, dollars..
Value of land and buildings.....	average per acre, dollars..
Proportion of farms reporting value.....	percent.....
Proportion of land in farms for which value was reported.....	percent.....
<b>Land in farms according to use:</b>	
Cropland harvested.....	farms reporting..
.....	acres.....
1 to 9 acres.....	farms reporting..
10 to 19 acres.....	farms reporting..
20 to 29 acres.....	farms reporting..
30 to 49 acres.....	farms reporting..
50 to 99 acres.....	farms reporting..
100 to 199 acres.....	farms reporting..
200 acres and over.....	farms reporting..
Cropland used only for pasture.....	farms reporting..
.....	acres.....
Cropland not harvested and not pastured.....	farms reporting..
.....	acres.....
Woodland pastured.....	farms reporting..
.....	acres.....
Woodland not pastured.....	farms reporting..
.....	acres.....
Other pasture (not cropland and not woodland).....	farms reporting..
.....	acres.....
Other land (house lots, roads, wasteland, etc.).....	farms reporting..
.....	acres.....
Cropland, total.....	farms reporting..
.....	acres.....
Land pastured, total.....	farms reporting..
.....	acres.....
Woodland, total.....	farms reporting..
.....	acres.....
Irrigated land in farms.....	farms reporting..
.....	acres.....
Land irrigated by sprinklers.....	farms reporting..
.....	acres.....
<b>FARM OPERATORS</b>	
Residing on farm operated.....	operators reporting..
Not residing on farm operated.....	operators reporting..
With other income of family exceeding value of agricultural products sold.....	operators reporting..
<b>Off-farm work:</b>	
Working off their farm, total.....	operators reporting..
1 to 99 days.....	operators reporting..
100 days or more.....	operators reporting..
Not working off their farm.....	operators reporting..
<b>Operators by age:</b>	
Under 25 years.....	operators reporting..
25 to 34 years.....	operators reporting..
35 to 44 years.....	operators reporting..
45 to 54 years.....	operators reporting..
55 to 64 years.....	operators reporting..
65 years and over.....	operators reporting..
Average age.....	years.....
<b>Operators by years on present farm:</b>	
Less than 5 years.....	operators reporting..
1 year or less.....	operators reporting..
5 to 9 years.....	operators reporting..
10 years or more.....	operators reporting..
Average number of years on present farm.....	years.....
<b>SPECIFIED FACILITIES</b>	
Telephone.....	farms reporting..
Electricity.....	farms reporting..
From a power line.....	farms reporting..
Average of last monthly electric bill.....	dollars.....
From a home plant.....	farms reporting..
Electric water pump.....	farms reporting..
Electric hot-water heater.....	farms reporting..
Home freezer.....	farms reporting..
Electric washing machine.....	farms reporting..
Electric chick brooder.....	farms reporting..
Electric power-feed grinder.....	farms reporting..
<b>SPECIFIED EQUIPMENT ON FARMS</b>	
Milking machine.....	farms reporting..
Grain combines.....	farms reporting..
.....	number.....
Corn pickers.....	farms reporting..
.....	number.....
Pick-up hay balers.....	farms reporting..
.....	number.....
Silos.....	farms reporting..
Motortrucks.....	farms reporting..
.....	number.....
Year of newest model.....	farms reporting..
Under 5 years.....	farms reporting..
5 to 9 years.....	farms reporting..
10 years and over.....	farms reporting..
Tractors.....	farms reporting..
.....	number.....
Wheel and/or crawler tractors other than garden.....	farms reporting..
Wheel tractors other than garden.....	farms reporting..
Year of newest model.....	farms reporting..
Under 5 years.....	farms reporting..
5 to 9 years.....	farms reporting..
10 years and over.....	farms reporting..
Garden tractors.....	farms reporting..
Crawler tractors.....	farms reporting..
.....	number.....
Automobiles.....	farms reporting..
.....	number.....
Year of newest model.....	farms reporting..
Under 5 years.....	farms reporting..
5 to 9 years.....	farms reporting..
10 years and over.....	farms reporting..
<b>Farms by class of work power:</b>	
No tractor, horses, or mules.....	farms reporting..
No tractor and only 1 horse or mule.....	farms reporting..
No tractor and 2 or more horses and/or mules.....	farms reporting..
Tractor and horses and/or mules.....	farms reporting..
Tractor and no horses or mules.....	farms reporting..
<b>FARMS BY KIND OF ROAD ON WHICH LOCATED</b>	
Hard surface.....	farms reporting..
Gravel, shell, or shale.....	farms reporting..
Dirt or unimproved.....	farms reporting..
<b>FARM LABOR WEEK PRECEDING ENUMERATION</b>	
Family and/or hired workers.....	farms reporting..
.....	persons.....
Family workers, including operator.....	farms reporting..
.....	persons.....
Operators working 1 or more hours.....	persons.....
Unpaid members of operator's family working 15 hours or more.....	farms reporting..
.....	persons.....
Hired workers.....	farms reporting..
.....	persons.....
Regular workers (to be employed 150 days or more).....	farms reporting..
.....	persons.....
Seasonal workers (to be employed less than 150 days).....	farms reporting..
.....	persons.....
Regular hired workers and no seasonal hired workers.....	farms reporting..
No report as to period of expected employment.....	farms reporting..
.....	persons.....
<b>Farms by kind of workers:</b>	
Both family workers and hired workers.....	farms reporting..
Family workers only.....	farms reporting..
Operators only.....	farms reporting..
Unpaid members of operator's family only.....	farms reporting..
Hired workers only.....	farms reporting..
<b>SPECIFIED FARM EXPENDITURES IN 1949</b>	
Specified farm expenditures.....	farms reporting..
Machine hire and/or hired labor.....	farms reporting..
.....	dollars.....
Machine hire.....	farms reporting..
.....	dollars.....
Hired labor.....	farms reporting..
.....	dollars.....
Feed for livestock and poultry.....	farms reporting..
.....	dollars.....
Livestock and poultry purchased.....	farms reporting..
.....	dollars.....
Seeds, bulbs, plants, and trees purchased.....	farms reporting..
.....	dollars.....
Gasoline and other petroleum fuel and oil.....	farms reporting..
.....	dollars.....
Farm machinery repairs.....	farms reporting..
.....	dollars.....
Tractor repairs.....	farms reporting..
.....	dollars.....
Other farm machinery repairs.....	farms reporting..
.....	dollars.....

Table 12.—LIST OF ITEMS FOR WHICH DATA ARE PUBLISHED BY SIZE OF FARM, COLOR AND TENURE OF OPERATOR, TYPE OF FARM, AND ECONOMIC CLASS OF FARM, FOR THE 1950 CENSUS OF AGRICULTURE—Continued

Item—Continued	Item—Continued
<b>Farms by size of farm:</b>	<b>Value of farm products sold in 1949 by source:</b>
Under 10 acres..... number..	All farm products sold..... dollars..
10 to 29 acres..... number..	All crops sold..... dollars..
30 to 49 acres..... number..	Field crops, other than vegetables
50 to 69 acres..... number..	and fruits and nuts, sold..... dollars..
70 to 99 acres..... number..	Vegetables sold..... dollars..
100 to 139 acres..... number..	Fruits and nuts sold..... dollars..
140 to 179 acres..... number..	Horticultural specialties sold..... dollars..
180 to 219 acres..... number..	All livestock and livestock products sold..... dollars..
220 to 259 acres..... number..	Dairy products sold..... dollars..
260 to 499 acres..... number..	Poultry and poultry products sold..... dollars..
500 to 999 acres..... number..	Livestock and livestock products,
1,000 acres and over..... number..	other than dairy and poultry, sold..... dollars..
<b>Farms by tenure of operator:<sup>1</sup></b>	Forest products sold..... dollars..
Full owners..... number..	Number of farms reporting sales of any
Part owners..... number..	farm products..... number..
Managers..... number..	Average sales per farm reporting..... dollars..
All tenants..... number..	<b>Livestock on April 1, 1950:</b>
Cash tenants..... number..	Horses and mules..... farms reporting..
Share-cash tenants..... number..	number..
Share tenants..... number..	All cattle and calves..... farms reporting..
Crop-share tenants..... number..	number..
Livestock-share tenants..... number..	Cows, including heifers that have calved..... farms reporting..
Croppers..... number..	number..
Other and unspecified tenants..... number..	Milk cows..... farms reporting..
Farms not classified by tenure..... number..	number..
<b>Farms by type:<sup>1</sup></b>	All hogs and pigs..... farms reporting..
Field-crop farms other than vegetable	number..
and fruit-and-nut..... number..	Chickens 4 months old and over..... farms reporting..
Cash-grain..... number..	number..
Cotton..... number..	<b>Livestock and livestock products sold in 1949:</b>
Other field-crop..... number..	Cattle and calves sold alive..... farms reporting..
Vegetable farms..... number..	number..
Fruit-and-nut farms..... number..	Hogs and pigs sold alive..... farms reporting..
Dairy farms..... number..	number..
Poultry farms..... number..	Chickens sold..... farms reporting..
Livestock farms other than dairy and poultry..... number..	number..
General farms..... number..	Chicken eggs sold..... farms reporting..
Primarily crop..... number..	dozens..
Primarily livestock..... number..	<b>Specified crops harvested in 1949:<sup>1</sup></b>
Crop and livestock..... number..	Corn for all purposes..... farms reporting..
Miscellaneous and unclassified farms..... number..	acres..
<b>Farms by economic class:<sup>1</sup></b>	Corn harvested for grain..... farms reporting..
Commercial farms..... number..	acres..
Class I..... number..	bushels harvested..
Class II..... number..	bushels sold..
Class III..... number..	Land from which hay was cut..... farms reporting..
Class IV..... number..	acres..
Class V..... number..	
Class VI..... number..	
Other farms..... number..	

<sup>1</sup> Data for following items were published or tabulated for selected States. Wheat, oats, rye, barley, flaxseed, rice, soybeans for beans, cowpeas harvested for dry peas, peanuts picked or threshed, dry field and seed beans, Irish potatoes, sweetpotatoes, tobacco, sugarcane, broomcorn, popcorn, sugar beets, and hops; land in bearing and nonbearing fruit orchards, groves, vineyards, and planted nut trees; apples and peaches; and cultivated summer fallow.